



1636 West North Temple • Suite 220 • Salt Lake City, UT 84116-3156 • 801-533-6071

November 3, 1987

Marathon Oil Company P. O. Box 2690 Cody, WY 82414

Dear Applicant:

RE: TEMPORARY APPLICATION NUMBER 09-1540 (T62937)

Enclosed is a copy of approved Temporary Application Number 09-1540 (T62937). This is your authority to construct your works and to divert the water for the uses described.

While this approved application does give you our permission to divert and use water, it does not grant easements through public or private lands in order to gain access to the source nor to convey the water to the place of use, nor does this approval eliminate the need for such other permits as may be required by this Division or any other agency in implementing your diversion.

This application will expire November 3, 1988, and it is expected that no diversion or use of the water will be done after that date unless another proposal has been made and approved.

Your contact with this office, should you need it, is with the Area Engineer, Mark Page. The telephone number is (801)637-1303.

Sincerely,

Robert L. Morgan, P.F.

State Engineer

RLM:rc

Encl.: Copy of Approved Temporary Application

OCT 0 9 1987 Airation No. T- 62.957 STATE OF UTAHCT 2 3 1987 WATER RIGHTS 10/24/87 - REC# 23/87 NOTE: The Anti-mation given in the following blanks should be free from explanatory matter, but when necessary, a complete supplementary statement should be made on the following page under the heading "Explanatory TTS" For the purpose of acquiring the right to use a portion of the unappropriated water of the State of Utah, for uses indicated by (X) in the proper box or boxes, application is hereby made to the State Engineer, based upon the following showing of facts, submitted in accordance with the requirements of the Laws of Utah. 1. Irrigation □ Domestic □ Stockwatering □ Municipal □ Power □ Mining □ Other Uses ☒ 2. The name of the applicant is Marathon Oil Company 3. The Post Office address of the applicant is P. O. Box 2690, Cody, Wyoming 82414 4. The quantity of water to be appropriated ______second-feet and/or ____3.5 ___acre-feet 5. The water is to be used for Oil Well Drilling from November 1, 1987 November 1, 1988 (Day) (Month) (Month) (Major Purpose) (Day) other use period __ (Month) (Day) (Minor Purpose) (Month) (Day) and stored each year (if stored) from (Month) (Dav) (Month) (Day) 6. The drainage area to which the direct source of supply belongs is.... (Leave Blank) 7. The direct source of supply is* An artesian well, Sec. 35, T38S, R25E (Name of stream or other source) which is tributary to_ "Note.—Where water is to be diverted from a well, a tunnel, or drain, the source should be designated as "Underground Water" in the first space and the remaining spaces should be left blank. If the source is a stream, a spring, a spring area, or a drain, so indicate in the first space, giving its name, if named, and in the remaining spaces, designate the stream channels to which it is tributary, even though the water may sink, evaporate, or be diverted before reaching said channels. If water from a spring flows in a natural surface channel before being diverted, the direct source should be designated as a stream and not a spring. The point of diversion from the source is in San Juan County, situated at a point* SE1 NW1 Sec. 35, T38S, R25E North 3537 East 2102 from Sw Corner Sec. 35 10-28-87 *Note.—The point of diversion must be located definitely by course and distance or by giving the distances north or south, and east or west with reference to a United States land survey corner or United States mineral monument, if within a distance of six miles of either, or if at a greater distance, to some prominent and permanent natural object. No application will be received for filing in which the point of diversion is not defined definitely. 9. The diverting and carrying works will consist of <u>pumping water from the artesian well</u> 10. If water is to be stored, give capacity of reservoir in acre-feet _____ legal subdivision of area inundated_____ area inundated in acres___ 11. If application is for irrigation purposes, the legal subdivisions of the area irrigated are as follows:

12. Is the land owned by the applicant? Yes No X If "No," explain on page 2. 13. Is this water to be used supplementally with other water rights? Yes _____No __X____ If "yes," identify other water rights on page 2. 14. If application is for power purposes, describe type of plant, size and rated capacity.______

mine, where the following-ores are mined _____

16. If application is for stockwatering purposes, number and kind of stock watered ______

17. If application is for domestic purposes, number of persons ______, or families ______

19. If application is for other uses, include general description of proposed uses Oil Well Drilling....

20. Give place of use by legal subdivision of the United States Land Survey for all uses described in paragraphs 14 to 19, incl. SE& NE& Sec. 26, T38S, R25E proposed wellsite for Iin Cup Mesa.

The use of water as set forth in this application will consume ______3.5____ second-feet and/or acrefeet of water and ______ second feet and/ or acre feet will be returned to the natural

#5-26. (See attached map for source and haul route)

18. If application is for municipal purposes, name of municipality.

15. If application is for mining, the water will be used in _____

stream or source at a point described as follows:

STATE ENGINEER'S ENDORSEMENT

WATER RIGHT NUMBER: 09 - 1540

APPLICATION NO. T62937

1. October 23, 1987

Application received.

2. October 29, 1987

Application designated for APPROVAL by MP and KLJ.

3. Comments:

Conditions:

This application is hereby APPROVED, dated November 3, 1987, subject to prior rights and this application will expire on November 3, 1988.

Robert L. Morgan

State Engineer

20. Give place of use by legal subdivision of the United States Land Survey for all uses described in paragraphs 14 to 19, incl. SEL NEL Sec. 26, T38S, R25E proposed wellsite for Iin Cup Mesa.

stream or source at a point described as follows:

The use of water as set forth in this application will consume 3.5 second-feet and/or acrefeet of water and 0 second feet and/ or acre feet will be returned to the natural

#5-26. (See attached map for source and haul route) 43-037-31368-0-1.

	ENF	^{2}LA	LX	TO.	K.
--	-----	----------	----	-----	----

	d Water (artesian v	vell)		
agraph #8 - San Juan C	ounty, SE NW of Sec	35, T38S, R25F	, S.1975 ft. and W.565 f	<u>t.</u>
from Na Co	rner Sec. 35, T38W	, R25E SLM&B.		
ragraph #12 - Surface	and mineral rights	owned by U. S.	Government	
			·	
			•	
				
			-	
		1		
	(Use page 4 if addit	ingl cynlanatory is	needed.)	
Mha cuanti	Use page 4 if addit ty of water sought to	be appropriated is	limited to that which	
The quanti	be beneficially used f	or the purpose he	limited to that which rein described	
		Bowley	Regulatory Coordi Signature of Applicant* .	nator
*If applicant is a corporaby its proper officer, or in the	ntion or other organization name of the partnership to partnership, the affidavit	, signature must be the control of the partners below need not be filled accompany the Ap	ne name of such corporation or org , and the names of the other partr led in. If there is more than one a pplication.	anizatio ners sha applicar
a power of attorney, authoriz	ing one to act for an, sho			
	DECLARATIO	ON OF CITIZENS	HIP	
CT+TF OF ITAH	,			
STATE OF UTAH, County of		•	10 nersonally anneared be	fore me
On thenotary public for the State of	day ofday of Utah, the above applica to become such a citizen.	nt who, on oath, decla	, 19, personally appeared be red that he is a citizen of the Unit	ed Stat
or has declared his intension				
My commission expires:				
My commission expires:			Notary Public	
My commission expires:	BEAL)		Notary Public	

STATE ENGINEER'S ENDORSEMENT

WATER RIGHT NUMBER: 09 - 1540

APPLICATION NO. T62937

1. October 23, 1987

Application received.

2. October 29, 1987

Application designated for APPROVAL by MP and KLJ.

3. Comments:

Conditions:

This application is hereby APPROVED, dated November 3, 1987, subject to prior rights and this application will expire on November 3, 1988.

obert L. Morgan,

State Engineer

BEFORE THE DIVISION OF OIL, GAS AND MINING DEPARTMENT OF NATURAL RESOURCES STATE OF UTAH

---00000---

IN THE MATTER OF THE APPLICATION OF MARATHON OIL COMPANY FOR

ADMINISTRATIVE APPROVAL OF

CAUSE NO. UIC-103

THE TIN CUP MESA # 5-26 WELL LOCATED IN SECTION 26,

TOWNSHIP 38 SOUTH, RANGE 25 EAST, S.L.M., SAN JUAN COUNTY, UTAH, AS A CLASS II INJECTION WELL

---00000---

THE STATE OF UTAH TO ALL PERSONS INTERESTED IN THE ABOVE ENTITLED MATTER.

Notice is hereby given that Marathon Oil Company, has requested administrative approval of the Tin Cup Mesa # 5-26 well, Section 26, Township 38 South, Range 25 East, S.L.M., San Juan County, Utah, as a Class II injection well.

The proposed operating data for the well is as follows:

INJECTION INTERVAL: Paradox Formation 5530' to 5555' MAXIMUM SURFACE PRESSURE: 3600 psig MAXIMUM INJECTION RATE: 4000 bwpd

Administrative approval of this application will be granted, unless objections are filed within fifteen days after publication of this Notice. Objections should be mailed to the Division of Oil, Gas and Mining, Attention: UIC Program Manager, 3 Triad Center, Suite 350, 355 West North Temple, Salt Lake City, Utah 84180-1203.

DATED this 12th day of November, 1987.

STATE OF UTAH DIVISION OF OIL, GAS AND MINING

Administrative Assistant

Notice for UIC-103 was sent to the follwing on 11-12-87

Bureau of Land Managment P.O. Box 970 Moab, Ut. 84532

Marathon Oil Co. P.O. Box 2690 Cody, Wyo. 82414

Mobil Oil Corp. P.O. Box 5444 Denver, Co. 80217

Celsius Energy Co. P.O. Box 11070 SaltLake City, Ut. 84147

MCOR Oil and Gas Corp. 5718 Westheimer Houston, Texas 77057

San Juan Record Legal Advertising P.O. Box 879 Monticello, Ut. 84535

Newspaper Agency Corp. Legal Advertising 157 Regent Street Salt Lake City, Ut. 84110

__11_12_87

Rocky Mountain Region Production United States



P.O. Box 2690 Cody, Wyoming 82414 Telephone 307/587-4961

November 6, 1987

RE: Application to Drill a Water Injection Well Tin Cup Mesa #5-26 Lease #U-31928 Sec. 26, T38S, R25E

San Juan County, Utah

Gentlemen:

In accordance with the Utah Division of Oil, Gas and Mining rules and regulations, we are enclosing a copy of the application requesting approval to drill and inject water into the above referenced well.

Copies of this application are on file in the State of Utah, Division of Oil, Gas and Mining office located in Salt Lake City, Utah, and in the Marathon Oil Company office in Cody, Wyoming.

Sincerely,

MARATHON OIL COMPANY

J. R. Kearns Production Manager Rocky Mountain Region

JRK/FMK:kjw

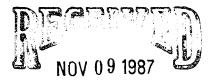
Attachment





P.O. Box 2690 Cody, Wyoming 82414 Telephone 307/587-4961

November 6, 1987



State of Utah Division of Oil, Gas and Mining 355 West North Temple 3 Triad Center, Suite 350 Salt Lake City, Utah 84180-1203

DIVISION OF CIL, GAS & MINING

RE: Application for Approval to Drill the Class II Injection Well: Tin Cup Mesa #5-26 SWNE 1,375' FNL & 1,635' FEL Section 26, Township 38 South, Range 25 East San Juan County, Utah

Dear Sir:

Pursuant to R615-5-2 of the Rules and Regulations of the State of Utah, Division of Oil, Gas and Mining, Marathon Oil Company hereby makes application for approval to drill and operate Tin Cup Mesa #5-26 as a Class II Water Injection well. The information requested by Rule R615-5-2 of the DOGM is as follows:

- The proposed injection well, Tin Cup Mesa #5-26 will be completed, equipped, operated and maintained in a manner that will prevent pollution and damage to any USDW, or other resources and will confine injected fluids to the interval approved.
- 2. A properly completed Form DOGM-U1C-1: Exhibit "A".
- 3. A plat showing the locations of the proposed injection well, all abandoned or active wells within a one-half mile radius of the proposed well, and the surface owner and the operator of any lands or producing leases, respectively, within a one-half mile radius of the proposed injection well. Exhibit "B" and Exhibit "B-1".
- 4. Copies of electrical or radioactive logs, including gamma ray logs, for the proposed well run prior to the installation of casing and indicating resistivity, spontaneous potential, caliper, and porosity will be submitted to the DOGM upon their completion.

State of Utah Division of Oil, Gas and Mining Page Two

- 5. A copy of cement bond or comparable log run for the proposed injection well after casing has been set and cemented will be submitted to the DOGM upon its completion.
- 6. A description of the casing or proposed casing program of the injection well is shown in Exhibit "C". The casing will be pressure tested to 3000 psi surface and witnessed by the DOGM prior to commencing injection operations.
- 7. The type of fluid to be used for injection will be Cutler Formation Water obtained from the Tin Cup Mesa #1 water supply well and produced Ismay formation water which is separated from produced oil at the Tin Cup Mesa Processing Facility. The Tin Cup Mesa Processing Facility and the Tin Cup Mesa #1 Water Supply Well are both located in the NW½ of Section 25, Township 38 South, Range 25 East, San Juan County, Utah. It is estimated that a maximum of 4000 BWPD will be injected.
- 8. Laboratory analyses are shown in Exhibit 'D' of :
 - A) the fluid to be injected (Cutler and Ismay)
 - B) the fluid in the formation into which the fluid is being injected (Ismay)
 - C) As shown on Exhibit "D" the Cutler water is of higher purity than the Ismay water.
- 9. The proposed injection pressures are:

Average 2400 psi Maximum 3600 psi

10. Evidence and data to support a finding that the proposed injection well, will not initiate fractures through the overlying strata or a confining interval that could enable the injected fluid or formation fluid to enter the fresh water strata is as follows:

Injectivity tests were previously performed on Tin Cup Mesa #1-25 and #3-23 in the same Upper Ismay reservoir. Water was injected through existing production perforations. From these tests a fracture pressure and frac gradient were obtained. Refer to Exhibits "E" and "F". Results are summarized below.

State of Utah Division of Oil, Gas and Mining Page Three

Tin Cup Mesa #3-23 Ti

Tin Cup Mesa #1-25

Frac Gradient Fracture Pressure	1.12 psi/ft. 6,300 psi.	1.14 psi/ft. 6,200 psi.
(Bottom Hole) Fracture Pressure (Surface)	3,867 psi.	3,848 psi.

Maximum surface injection pressure requested for Tin Cup Mesa #5-26 is 3,600 psi, which is more than 200 psi below fracture pressure. High pressure shut down devices and relief valves will be designed to operate at 3,500 psi and 3,600 psi, respectively, to insure that the fracture pressure will not be exceeded.

11. The injection zone is the Upper Ismay of the Paradox Formation. The Upper Ismay is composed of porous and permeable limestone and dolomite. At the #5-26 Tin Cup Mesa location, the injection zone is expected to be 161' thick with the top at 5,430' GL. The porous and permeable carbonate rocks vary in thickness from 0' to 120', but they are restricted to the Tin Cup Mesa Field only. Outside the field, the carbonate rocks are composed of tight limestone and they are less than 20' thick.

The confining stratum directly above the injection zone is the Upper Ismay massive anhydrite. The massive anhydrite is a dense, tight rock which is estimated to be 9' thick at the #5-26 Tin Cup Mesa location with the top at 5,421' GL. The anhydrite thins across the field to 5' and thickens away from the field to 90' or more. Above the massive anhydrite is an impermeable layer of interbedded anhydrite and calcareous and dolomitic shales. The thickness of this layer ranges between 20' and 45' and it is expected to be approximately 25' thick at the #5-26 location with the top at 5,396' GL. A black shale overlies the layer of interbedded anhydrite and shales.

The black shale is expected to be approximately 14' thick at the #5-26 Tin Cup Mesa location and the top will be at approximately 5,382' GL.

State of Utah Division of Oil, Gas and Mining Page Four

The massive anhydrite overlying the injection zone extends for three miles from the Tin Cup Mesa Field. The interbedded anhydrite and shales extend more than 3 miles from the Tin Cup Mesa Field. The black shale above the interbedded anhydrite and shales extends throughout the southern Paradox Basin. All three of these units, the massive anhydrite, the interbedded anhydrite and shales, and the black shale, are impermeable and they will effectively seal off the oil, gas, and water of the injection zone from any strata above the Upper Ismay.

The confining stratum below the injection zone is the Hovenweep Shale. The Hovenweep Shale is composed of impermeable calcareous and dolomitic shales. The Hovenweep is approximately 168' thick at the #5-26 Tin Cup Mesa location and the top is at 5,591'. The Hovenweep extends more than a few miles beyond the Tin Cup Mesa Field and throughout the southern Paradox Basin. The Hovenweep is impermeable and it will effectively seal off the oil, gas, and water of the injection zone from any strata below the Upper Ismay.

- 12. There are six wells located within a one-half mile radius of the proposed #5-26 Tin Cup Mesa Well, shown on Exhibit "G". Well bore schematics showing the mechanical condition for each well are attached. (Exhibit "G-1" thru Exhibit "G-6"). As shown on each wellbore diagram, the cement top behind the casing of each well is of sufficient height to prevent migration of any fluid up or down from the interested zone.
- 13. An affidavit certifying that a copy of the application has been provided to all operators, owners, and surface owners within a one-half mile radius of the proposed injection well is attached as Exhibit "H".
- 14. If additional information is required please contact the Marathon Oil Company office in Cody, Wyoming.

If no objections to the granting of this Application are timely filed for drilling and injecting into the Ismay Formation in the proposed Tin Cup Mesa #5-26 well from any lease operators, owners or surface owners within a one-half $(\frac{1}{2})$ mile radius thereof, Applicant requests that this "Application" be approved administratively.

State of Utah Division of Oil, Gas and Mining Page Five

If objections to the drilling and injecting into the Ismay Formation in the proposed Tin Cup Mesa #5-26 well are timely filed, then Applicant requests that the matter be set for hearing and that it be advised of the hearing date.

Six (6) additional copies of this Application are attached hereto.

Respectfully submitted,

MARATHON OIL COMPANY

J. R. Kearns

Production Manager Rocky Mountain Region

JRK/FMK:kjw

Attachments

FORM NO. DOGM-UIC-1

My commission expires

STATE OF UTAH DIVISION OF OIL, GAS, AND MINING ROOM 4241 STATE OFFICE BUILDING SALT LAKE CITY, UTAH 84114 (801) 533-5771 (RULE I-5)



DIVISION OF CIL, GAS & MINING

IN THE MATTER OF THE APPLICATION Marathon 011 Company	TION OF		- , - , co or lattifuld
ADDRESS P. O. Box 2690		CAUSE NO	
Cody, Wyoming	ZIP 82414	ENHANCED RECOVE	RY INJ. WELL EX
	CORPORTATION X	DISPOSAL WELL	· '
FOR ADMINISTRATIVE APPROVA			-
INJECT FLUID INTO THE Tin Cup SEC. 26 TWP. 38S			
	RANGE <u></u>	•	
	COUNTY, UTAP		
	•	APPLICATION	
Comes now the applicant 1. That Rule 1-5 (b) 6 concernions. 2. That the applicant subsets	uthorizes administ	ative approval of enhanced	recovery injections or disposal
Lease Name	Well No.	Field	County
Tin Cup Mesa	<u>5-26</u>	Tin Cup Mesa	San Juan
Location of Enhanced Recovery Injection or Disposal Well 375 FNL &	1635 FEL sec. 26	Twp. <u>38S</u>	Rge25F
New Well To Be Drilled Yes ⊠ No □	Old Well To Be Conve	rted Casina Test	» □ No □ Date(Will Notify)
Depth-Base Lowest Known Fresh Water Within ½ Mile None	Does Injection Zone C Oil-Gas-Fresh Water	ontain Vithin ½ Mile YES 🔯 NO 🗆	State What 011 & Gas
Location of N26°1'W 1,881' to)	Geologic Name(s) Cutler 290	00' KB and
Injection Source(s) NW corner o	f Section 25	and Depth of Source(s) Upper	Ismay Produced Water
Geologic Name of Injection Zone	sma y	Depth of Injection Interval 5530' to 5555'	_ Gross (Proposed)
a. Top of the Perforated Interval: (Proposed) 5!	530' b. Base of Fresh	Water: oc. Intervening Thi	ickness (a minus b) 5530 '
Is the intervening thickness sufficient to without additional data?		protected (ES) NO	
Lithology of Intervening Zones Sands to	ones. Siltstone	s. Shales limestones	and Anhydrita
Injection Rates and Pressures			and Annyar Le
	Maximum	4000 3600	B/D PSI
The Names and Addresses of Those To W			
See Exhibit 'H' of the A	<u>\ttached Class</u>	<u> II Injection Well Appl</u>	ication
			-
State of Wyoming		Ofteam	D Volume
D 1	· · · · · · · · · · · · · · · · · · ·	A	R. Kearns Population Manager
County of <u>Park</u> Before me, the undersigned authorit	v. on this day personally	J. R. Kearns, R	roduction Manager locky Mountain Region
known to me to be the person whose nam	e is subscribed to the ab	ve instrument, who being by me du	ly sworn on oath states, that he is duly
authorized to make the above report and		- ~	aid report is true and correct.
Suscribed and white the m	this State of	Nov. , 19 8 1	
SEAL Ports	Wycolated	Connet	7 Shwartz

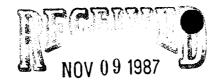
Notary Public in and for Wyomen

- 1. Attach qualitative and quantitative analysis of fresh water from 2 or more producing wells within 1 mile of injection well showing location of wells and date samples were taken, or statement as to why samples were not submitted.
 - 2. Attach qualitative and quantitative analysis of representative sample of water to be injected.
- 3. Attach plat showing subject well and all known oil and gas wells, abandoned, drilling and dry holes within ½ mile, together and with name of operator.
- 4. Attach Drillers Log (Form DOGM-UIC-2). (Appropriate Surety must be on file with Conservation Division.)
 - 5. Attach Electric or Radioactivity Log of Subject well (if released).
- 6. Attach schematic drawing of subsurface facilities including; Size, setting depth, amount of cement used measured or calculated tops of cement surface, intermediate (if any) and production casings; size and setting depth of tubing; type and setting depth of packer; geologic name of injection zone showing top and bottom of injection interval.
- 7. The original and 6 copies of application, and one complete set of attachments shall be mailed to the Division.
- 8. Deliver 1 copy of application to landowner on whose land injection well is located and to each operator of a producing leasehold within ½ mile of injection well.
- 9. Affidavit of mailing or delivery shall be filed not later than five days after the application is filed.
- 10. Notice that an application has been filed shall be published by the Division in a newspaper of general circulation in the county in which the well is located. The Division shall file proof of publication before the application is approved. The notice shall include name and address of applicant, location of proposed injection or disposal well, injection zone, injection pressure and volume. If no written objection is received within 15 days from date of publication the application will be approved administratively.
- 11. A well shall not be used for injection or disposal unless completed machine accounting Form DOGM-UIC-3b is filed September 1st, each year.
- 12. Approval of this application, if granted, is valid only as long as there is no substantial change in the operations set forth in the application. A substantial operation change requires the approval of a new application.
 - 13. If there is less intervening thickness required by Rule I-5 (b) 4 attach sworn evidence and data.

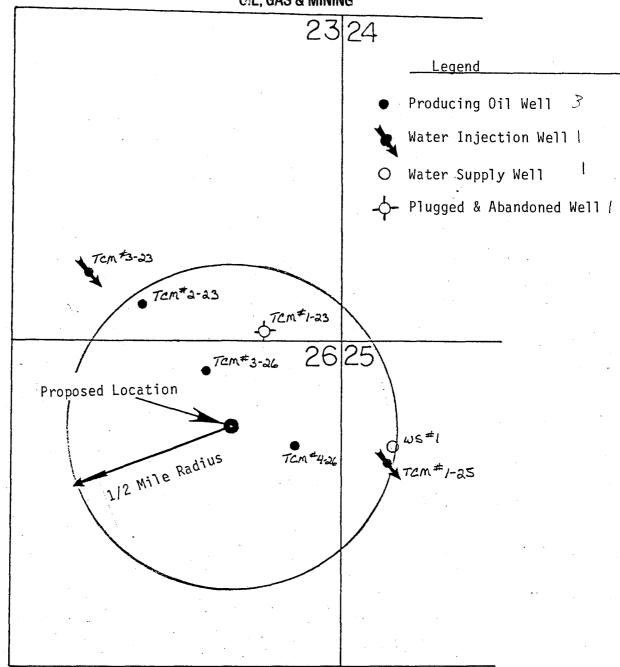
CASING AND TUBING DATA

NAME OF STR	ING SIZE	SETTING DEPTH	SACKS CEMENT	TOP OF CEMENT	TOP DETERMINED BY
Surface	9-5/8"	2250'	865	Surface	Returns and Sight
Intermediate					
Production	5-1/2"	5811'	470	2150'	Logs will be run
Tubing	2-7/8"		Type of pac	e-Type-Depth o ker Will be de	f Tubing Packer termined at a later date
Total Depth	Geologic Name - I I smay	nj. Zone Dep	oth - Top of Inj. In 5530		h - Base of Inj. Interval 5555'

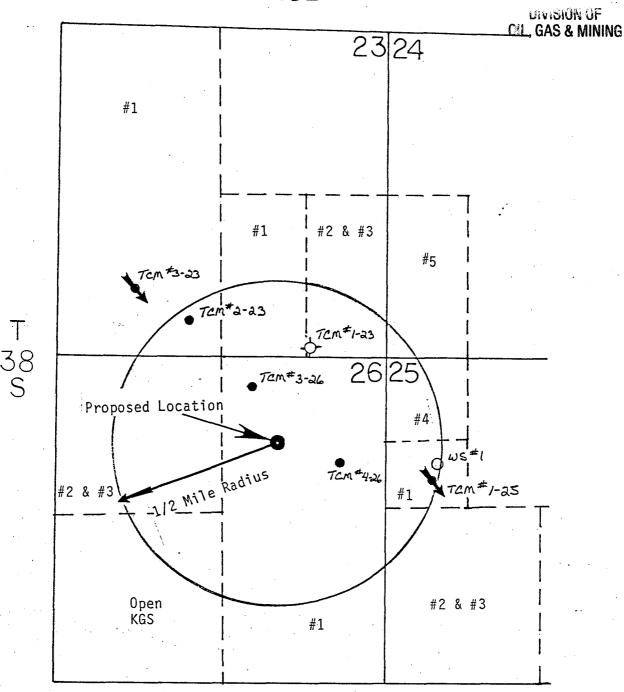
SURFACE CASING 9-5/8" Set at 2250' Set at 5446' Set at 5446' Set at 541'



DIVISION OF C!L, GAS & MINING



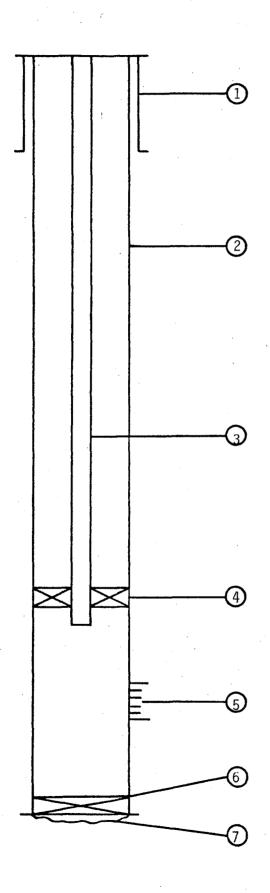
Surface Owner of all lands within a one-half mile radius is the Department of the Interior, Bureau of Land Management.



LEASE OWNERS WITHIN A ONE-HALF MILE RADIUS

- Marathon Oil Company
 Mobil Oil Corporation
 Celsius Energy Company
 MCOR Oil & Gas Corporation
- TXP Operating Company

Proposed Tin Cup Mesa #5-26 Water Injection Well



DESCRIPTION

- 1. 9-5/8", 36#, K-55 casing set at 2250' and cemented to surface.
- 2. 5-1/2" 15.5#&17#, K-55 casing set from TD 5811' to surface and cemented to approximately 2150'.
- 3. 2-7/8" 6.5#, J-55 Internally coated tubing landed in the packer.
- 4. Packer set at approximately 5446'.
- 5. Proposed Ismay Perforations 5530'-5555'.
- 6. PBTD at approximately 5800'
- 7. TD 5811'



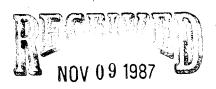
DIVISION OF CIL, GAS & MINING

Exhibit 'D'

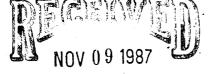
SUUMAR) ANALYSES* AT TIN CUP MESA, UTAH

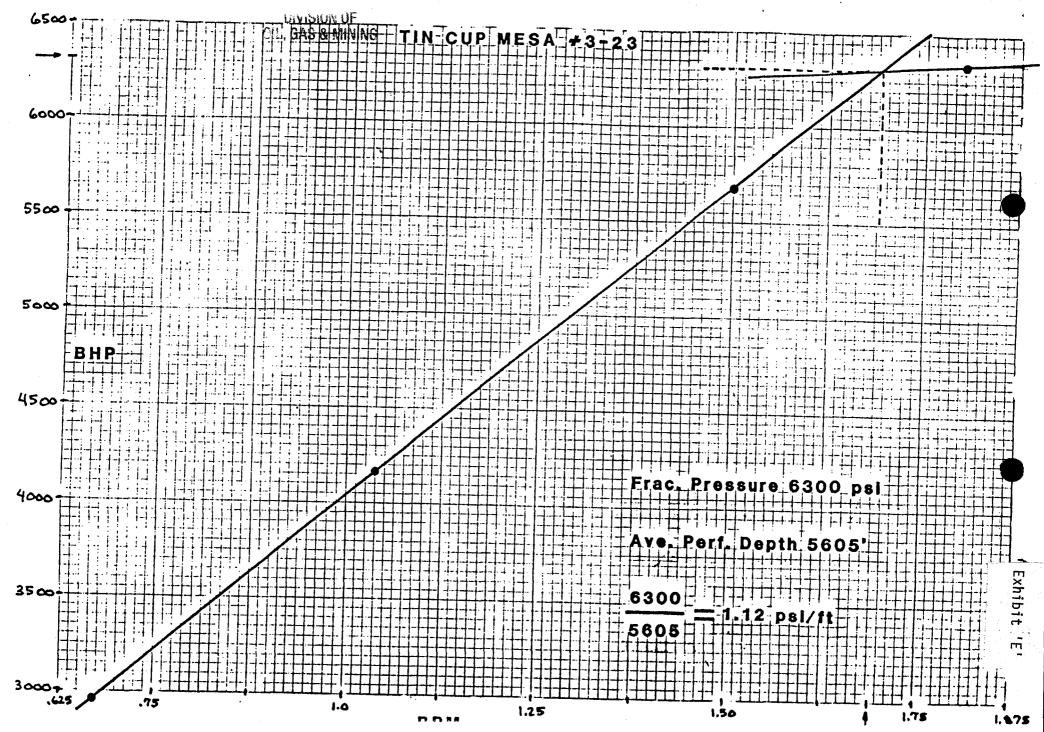
	Cutler Water Properties	Ismay Water <u>Properties</u>
PH	7.9	6.4
Temp °F	68	100
TDS (mg/1)	75,562	256,894
TSS (mg/1)	< 1.0	N.A.
Ca (mg/1)	4,840	11,235
Na (mg/1)	18,360	67,880
C1 (mg/1)	39,440	147,008
0 ₂ (ppb)	< 10	< 100
CO ₃ (mg/1)	< 1	< 1
Fe (mg/1)	1.7	9.0
H ₂ S (mg/1)	< 0.1	< 0.1
SO ₄ (mg/1)	1,380	735
HCO ₃ (mg/1)	41	67
K (mg/l)	78	2,864
Sr (mg/1)	170	375
Ba (mg/1)	< 20	< 20

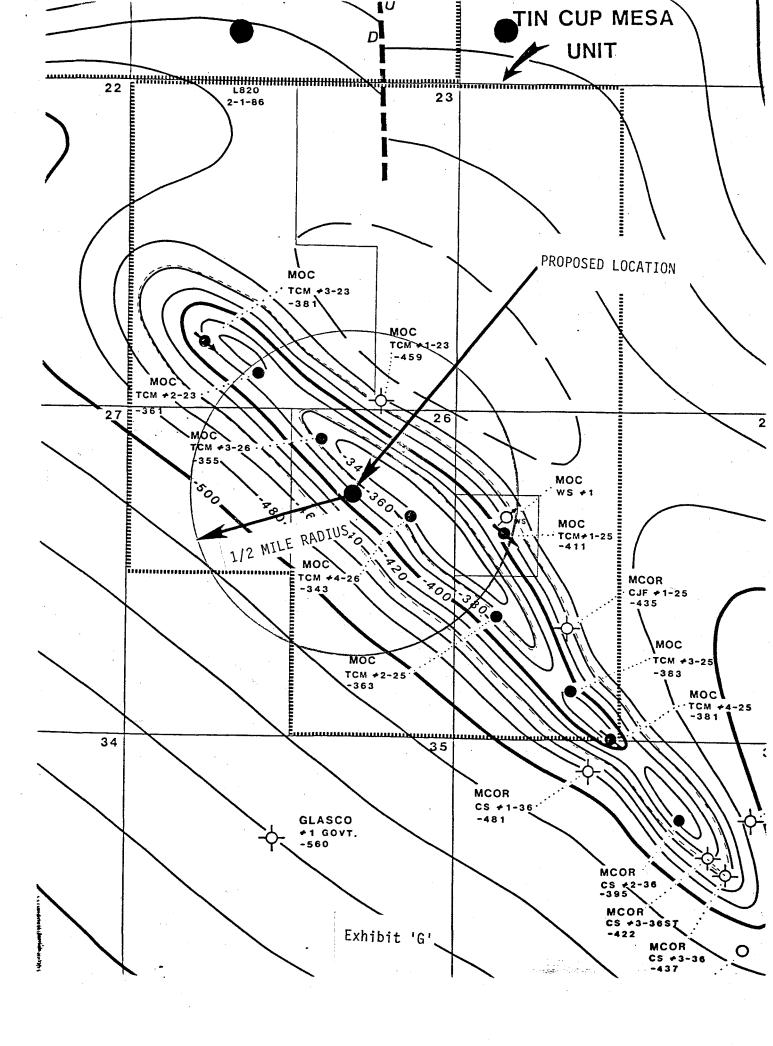
^{*}These tests were performed by DRC personnel.



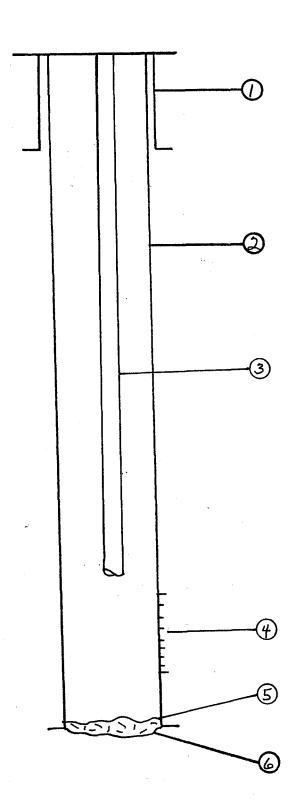
DIVISION OF CIL, GAS & MINING





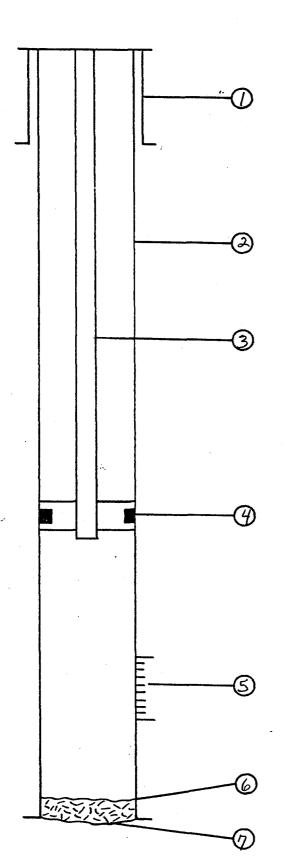


Tin Cup Mesa Water Supply Well #1 Sec. 25, T38S, R25E San Juan Co., Utah



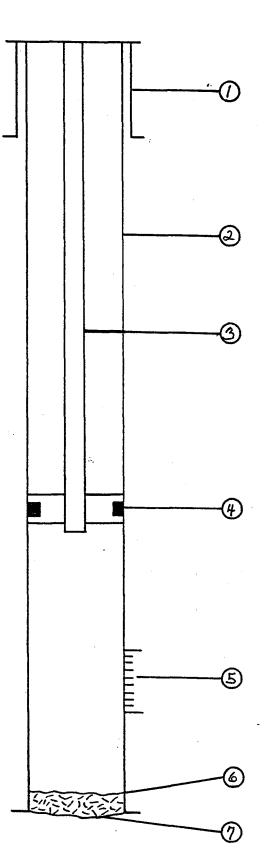
- 1. 9 5/8" 40# S-80 casing set at 1,489' and cemented to surface.
- 2. 7" 23# N-80 casing set at 3,414' and cemented to surface.
- 3. $3\frac{1}{2}$ ' 9.3# J-55 tubing set at 2,007'.
- 4. Cutler Formation perforations 2,410' 2,424', 2,438' 2,450', 2,458' 2,466', 2,914' 2,924', 2,932'- 2,946', 3,001' 3,013', 3,226' 3,236', 3,106' 3,116', 3,188' 3,196', 3,246' 3,258' KB.
- 5. PBTD 3,315'.
- 6. TD 3,415'.

Tin Cup Mesa Water Injection Well #1-25 Sec. 25, T38S, R25E San Juan Co., Utah



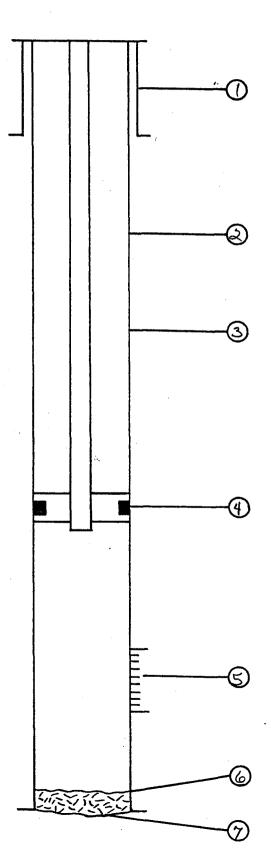
- 1. 9 5/8" 36# K-55 casing set at 1,557', cemented with 640 sacks of cement to surface and tested to 1,500 psi.
- 2. 7" 23# and 26# K-55 casing set at 5,712', cemented with 995 sacks of cement to 1,520' KB (CBL) and tested to 3,000 psi.
- 3. 2 7/8" tubing landed in packer.
- 4. Packer set at 5,346; KB.
- 5. Ismay Perforations 5,416' 5,426'.
- 6. PBTD 5,460' KB.
- 7. TD 5,714' KB.

Tin Cup Mesa #3-26 Sec. 26, T38S, R25E San Juan Co., Utah



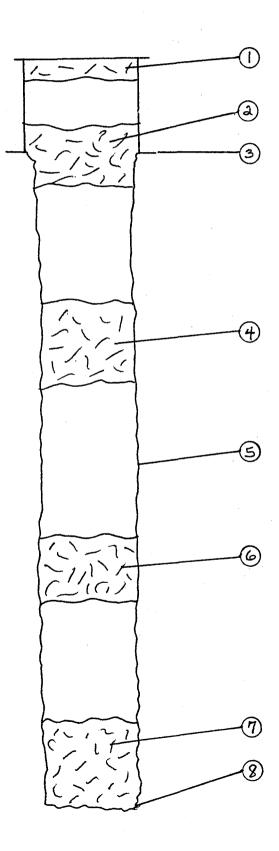
- 1. 13 3/8" 54,5# K-55 casing set at 1,224' and cemented to surface with 1,200 sacks of cement.
- 2. 7" 20#, 23#, and 26# K-55 casing set at 5,774' and cemented with 1,220 sacks of cement to 970' KB.
- 3. 2 7/8" 6.5# N-80 tubing landed in the packer.
- 4. Packer set at 5,436' KB.
- 5. Ismay perforations 5,482' 5,531'.
- 6. PBTD 5,695'.
- 7. TD 5,780'.

Tin Cup Mesa #4-26 Sec. 26, T38S, R25E San Juan Co., Utah

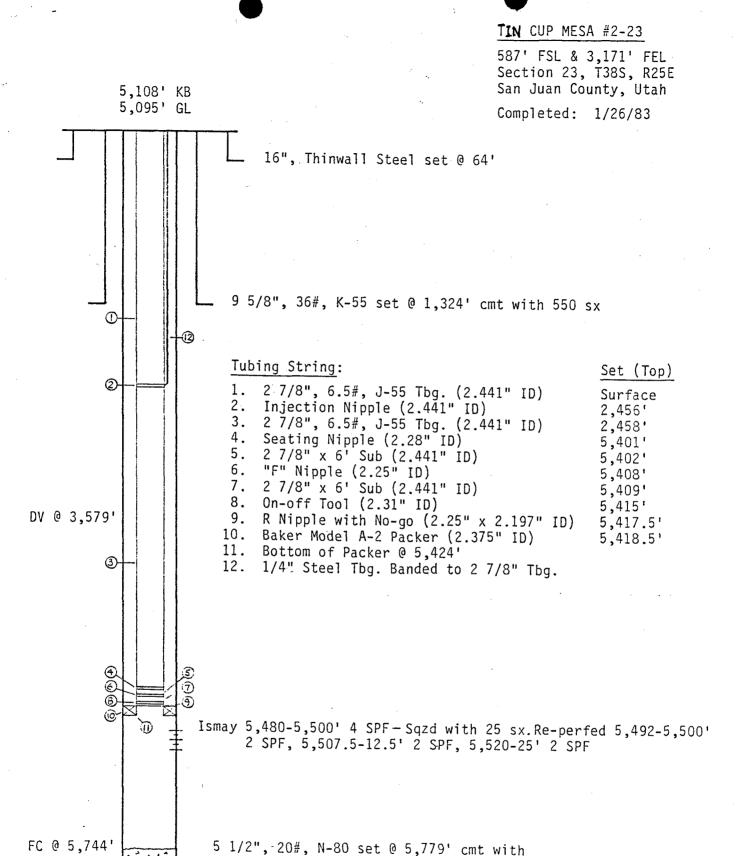


- 1. 9 5/8" 40# N-80 casing set at 1,500' and cemented to surface with 610 sacks of cement.
- 2. 7" 26# K-55 casing set at 5,814' and cemented to surface with 1,125 sacks of cement.
- 3. 2 7/8" 6.5# N-80 tubing landed in the packer.
- 4. Packer set at 5,441' KB.
- 5. Ismay perforations 5,504' 5,562'.
- 6. PBTD 5,726' KB.
- 7. TD 5,815' KB.

Tin Cup Mesa #1-23 Sec. 23, T38S, R25E San Juan Co., Utah



- 1. A Ten sack cement plug to surface.
- 2. A 75 sack cement plug from 1,250' 1,450'.
- 3. 9 5/8" 36# K-55 casing set at 1,348' and cemented to surface with 546 sacks of cement.
- 4. A 70 sack cement plug from 2,470' 2,670'.
- 5. Open hole uncased to a TD of 5,810'.
- 6. A 70 sack cement plug from 4,225' 4,425'.
- 7. A 455 sack cement plug from 5,350' 5,810'.
- 8. TD 5,810'.



1st Stage: 800 sx Class B

2nd Stage: 1,000 sx Class B 65/35 Poz, 6% Bentonite

PBTD 5,744'

TD 5,798'

State of Utah Division of Oil, Gas and Mining

EXHIBIT "H"

Application of Marathon Oil Company to Drill the Water Injection Well Tin Cup Mesa #5-26, located in Section 26, Township 38 South, Range 25 East, San Juan County, Utah

AFFIDAVIT

STATE OF UTAH) SS. COUNTY OF SAN JUAN)

J. R. Kearns, of legal age, being first duly sworn, upon oath states:

The following named people constitute all lease operators, owners, and surface owners (as defined by the Utah Division of Oil, Gas and Mining Laws) within a one-half (1/2) mile radius of the proposed injection well, described in the Application to which this Affidavit is attached, to wit:

Surface Owners

Bureau of Land Management P.O. Box 970 Moab, Utah 84532

Lease Holders

Marathon Oil Company P.O. Box 2690 Cody, Wyoming 82414

Bureau of Land Management P.O. Box 970 Moab, Utah 84325

Mobil Oil Corporation P.O. Box 5444 Denver, Colorado 80217

Celsius Energy Company P.O. Box 11070 Salt Lake City, Utah

MCOR Oil and Gas Corporation 5718 Westheimer Houston, Texas 77057

State of Utah Division of Oil, Gas and Mining Exhibit 'H' Page Two

> TXP Operating Company Box 1396 Houston, Texas 77251

The addresses listed after the names of the operator and surface owners constitute the last mailing address of said operator and owner as far as the applicant Marathon Oil Company and the undersigned have been able to ascertain.

On the <u>6th</u> day of <u>November</u>, 1987, Applicant caused a full and true copy of the Application to which this Affidavit is attached, to be mailed to the operators or owners, other than Applicant, at their addresses herein mentioned.

ฮ. ์R. Kearns Production Manager

Rocky Mountain Region

Subscribed and sworn to before me this by day of <u>November</u>, 1987.

My commission expires 9-6-1985

Connic A. Shwartz Notary Public

Consist A Services Noterry Points
County of State of Party
Sty Commence Services 9-6-038

orm 3160-3 (November 1983) nerly 9-331C)

12-1/4"

SUBMIT IN (Other in UNITED STATES rever

TRIP CATE	Form approved.
structions on	Budget Bureau No. 1004-013
se side)	Expires August 31, 1985

470 sacks to 2150'

(tolmerly)—obic,	DEPARTMENT	OF THE INTER	IOR	1	5. LEASE DESIGNATION AND BERIAL NO.
	BUREAU OF	LAND MANAGEMEN	Τ .		U-31928
APPLICATION	Y FOR PERMIT T	O DRILL, DEEPE	N, OR PLUG B	ACK	6. IF INDIAN, ALLOTTEE OR TRIBE NAME
la. TYPE OF WORK					
	ILL 🛛	DEEPEN 🗌	PLUG BA	CK 🗌	7. UNIT AGREEMENT NAME
b. TYPE OF WELL		18 0	TE A TOWN		7 Tin Cup Mesa
WELL X	TELL OTHER WA	ter Injection	NE ZONE		
2. NAME OF OPERATOR					Tin Cup Mesa
Marathon 0il	Company		NOV 0.9 1987	7	
3. ADDRESS OF OPERATOR			1404 00 100		5-26 10. FIELD AND POOL, OR WILDCAT
P. O. Box 269	90, Cody, Wyomin	g 82414	THE THIRT IS		
At curiaca	seport location clearly and	in accordance with any S	C.L. GAS & MINI	NC.	Tin Cup Mesa 11. sec., T., B., M., OB BLK.
1375 FNL &	1635' FEL		CAE, UAO G IVINIM	YG .	AND SURVEY OR AREA
At proposed prod. zo	ne				Sec. 26, T38S, R25E
14. DISTANCE IN MILES	AND DIRECTION FROM NEAD	EST TOWN OR POST OFFICE	;•		12. COUNTY OR PARISH 13. STATE
Approximatel	y 8.5 miles Nort		Trading Post		San Juan Utah
15. DISTANCE FROM PROF LOCATION TO NEARES	osed* 1555' to	Unit Line 16. NO	OF ACRES IN LEASE		OF ACRES ASSIGNED HIS WELL
DRODERTY OR I CLER		Slease line 7	60 lı	N/A	
18. DISTANCE FROM PRO	POSED LOCATION®		OPOSED DEPTH	20. ROTA	RY OR CABLE TOOLS
OR APPLIED FOR, ON TH	DRILLING, COMPLETED,	rox. 988' 581	1' M	Rota	rv
21. ELEVATIONS (Show w		,,, OX 1 3 3 3 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5			22. APPROX. DATE WORK WILL START*
5101' Ungrad	ed GL				ASAP
23.		PROPOSED CASING ANI	CEMENTING PROGR	AM	
SIZE OF HOLE	BIZE OF CABING	WEIGHT PER FOOT	SETTING DEPTH		QUANTITY OF CEMENT
12-1/4"	9-5/8"	36#	2250'	865 s	acks to Surface

Marathon Oil Company proposes to drill Tin Cup Mesa #5-26 as a water injection well. A 12-1/4" hole will be drilled to 2250' and 2250' of new 9-5/8", 36#, K-55 casing will be run and cemented to surface. A 7-7/8" hole will then be drilled to 5811', TD and 5-1/2" 15.5# and 17#, K-55 casing will be run from TD to surface and cemented to approximately 2150'. The Ismay formation well be perforated, treated as necessary and the well will be completed as a water injection well.

5811'

BLM-Orig & 3--cc: UDOGM-7, WRF, FMK, Reservoir, Drilling-2, WTR, RDT, Title & Contract (Houston)

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive sone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

preventer program, - and	
34. SIGNED RP Mlaba	TITLE Regulatory Coordinator DATE November 6, 198
(This space for Federal or State office use) PERMIT NO. 43-037-3/368	APPROVED BY THE STATE APPROVAL DATE OF LITAH DIVISION OF
APPROVED BYCONDITIONS OF APPROVAL, IF ANY:	OIL, GAS, AND MINING PATE 12-7-8 FATE ONLY ON
≠ (WELL SPACING: 1645-2-3 See Instructions On Reverse Side

1375 PROPOSED LOCATION 1635 Section 26 Scale: 1"= 1000"

WELL LOCATION: MARATHON OIL CO. - TIN CUP MESA No. 5-26

Located 1375 feet South of the North line and 1635 feet West of the East line of Saction 26 Township 38 South Range 25 East Salt Lake Meridian

Existing ground elevation determined at 5101 feet based on Well No. 3-26,

i hereby certify they above prot represents a survey mode under my supervision and that it is acquirate

FREDERICK H. REED

Exhibit 'B'

MARATHON OIL CO. Cody, Wyoming

WELL LOCATION PLAT Tin Cup Mes No. 5-26 Sec. 26, T387, R25 E San Juan County, Utah

CLARK - RELO \$ 45500 | 047 E - Sept. 30, 1987

Form 3160-3 (November 1983) (formerly 9-331C) -17 175 SUBMIT IN TRIPE (Other instructions on reverse side) UNITED STATES

5. LEASE DESIGNATION AND SERIAL NO.

DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

rorm approved.	
Budget Bureau No.	1004-0136
Expires August 31,	1985

	BUREAU OF	LAND MANAGEMEN	Τ		U-31928
APPLICATION	FOR PERMIT T	O DRILL, DEEPE	N, OR PLUG B	ACK	6. IF INDIAN, ALLOTTEB OR TRIBE NAME
a. TYPE OF WORK DRI b. TYPE OF WELL OIL GA	LL X	DEEPEN ter Injection	PLUG BAC	K 🗆	7. UNIT AGREEMENT NAME Tin Cup Mesa 8. FARM OR LEASE NAME Tin Cup Mesa 9. WELL NO.
B. ADDRESS OF OPERATOR P. O. BOX 269	O, Cody, Wyomin	g 82414 in accordance with any S	NOV 09 198		5-26 10. FIELD AND POOL, OR WILDCAT Tin Cup Mesa 11. SEC., T., R., M., OB BLK. AND SURVEY OB AREA
At proposed prod. zon			., who a sense		Sec. 26, T38S, R25E
	NAME OF A STREET OF THE STREET	heast of Hatch			12. COUNTY OR PARISH 13. STATE San Juan Utah F ACRES ASSIGNED
LOCATION TO NEAREST	INE, FT. g. unit line, if any 1 905 OSED LOCATION®	L'Lease Line 7	60 OPOSED DEPTH	N/A 20. ROTAR	IS WELL IY OR CABLE TOOLS
OR APPLIED FOR, ON TH 21. ELEVATIONS (Show who 5101 Ungrade	ether DF, RT, GR, etc.)	rox. 988' 581	1'	Rotar	22. APPROX. DATE WORK WILL START* ASAP
23.		ROPOSED CASING ANI	CEMENTING PROGRA	M	
12-1/4" 7-7/8" Marathon Oi	9-5/8" 5-1/2" Company propo	36# 15.5# & 17#	2250' 5811' n Cup Mesa #5-2	470 sa	water injection well.
A 12-1/4" h will be run and 5-1/2" to approxim	ole will be dr and cemented to 15.5# and 17#.	illed to 2250' o surface. A 7- K-55 casing wi he Ismay format	and 2250' of r 7/8" hole will 11 be run from ion well be per	new 9-5 then be TD to forated	/8", 36#, K-55 casing e drilled to 5811', TD surface and cemented , treated as necessary
BLM-Orig &	3cc: UDOGM-7 Title &	, WRF, FMK, Reso Contract (Hous	ervoir, Drillin ton)	g-2, WT	R, RDT,
zone. If proposal is to preventer program, if an	E PROPOSED PROGRAM: If drill or deepen direction	proposal is to deepen or	nlug hack, give data on I	resent prod nd measure	uctive sone and proposed new productive d and true vertical depths. Give blowout
signed QPW	Jealan		egulatory Coord	inator	DATE November 6, 198
(This space for Fed	eral or State office use)				
PERMIT NO.	gr ^a l .		APPROVAL DATE		
APPROVED BYCONDITIONS OF APPRO	VAL, IF ANY:	TITLE			DATE

MOAB DISTRICT

DIVISION OF CIL, GAS & MINING

CONDITIONS OF APPROVAL FOR PERMIT TO DRILL

Company: Marathon Oil Company Well Name: _____ Tin Cup Mesa #5-26

Location: Section 26, T38S, R25E Lease No.: U-31928 (Tin Cup Mesa)

1375' FNL, 1635' FEL

All lease and/or unit operations will be conducted in such a manner that full compliance is made with applicable laws, regulations (43 CFR 3100), Onshore Oil and Gas Order No. 1, and the approved plan of operations. The operator is fully responsible for the actions of subcontractors. A copy of these conditions will be furnished to the field representative to ensure compliance.

A. DRILLING PROGRAM

- 1. Surface Formation and Estimated Formation Tops: Refer to Item #2 of attached "Drilling Operations Plan".
- 2. Estimated Depth at Which Oil, Gas, Water, or Other Mineral Bearing Zones are Expected to be Encountered:

<u>Formation</u> <u>Zone</u>

Expected oil zones:
Expected gas zones:
Expected water zones:
Expected mineral zones:

Refer to Item 3 of attached "DOP".

"DOP" - Drilling Operations Plan

All fresh water and prospectively valuable minerals (as described by BLM at onsite) encountered during drilling, will be recorded by depth, cased, and cemented. All oil and gas shows will be tested to determine commercial potential.

3. Pressure Control Equipment: Refer to Item 7 of the attached "Drilling Operations Plan".

BOP systems will be consistent with API RP 53. Pressure tests will be conducted before drilling out from under all casing strings which are set and cemented in place. Blowout preventor controls will be installed prior to drilling the surface casing plug and will remain in use until the well is completed or abandoned. Preventers will be inspected and operated at least daily to ensure good mechanical working order, and this inspection recorded on the daily drilling report. Preventers will be pressure tested before drilling casing cement plugs. The San Juan Resource Area will be notified 1 day before pressure testing.

4. <u>Casing Program and Auxiliary Equipment</u>: Refer to Item 6A and 9A of the attached "Drilling Operations Plan".

Conditions of Approval for Permit to Drill Tin Cup Mesa #5-26 Page 2

> Anticipated cement tops will be reported as to depth, not the expected number of sacks. The San Juan Resource Area will be notified 1 day before running casing strings and cement.

- 5. Mud Program and Circulating Medium: Refer to Item 8 of the attached "Drilling Operations Plan".
- 6. <u>Coring, Logging and Testing Program</u>: Refer to Item 4 of the attached "Drilling Operations Plan".

Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (Form 3160-4) will be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3164. Two copies of all logs, core descriptions, core analysis, well-test data, geologic summaries, sample description, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, will be filed with Form 3160-4. If requested, samples (cuttings, fluids, and/or gases) will be submitted to the District Manager.

- 7. Abnormal Conditions, Bottom Hole Pressures and Potential Hazards: Refer to Item 5 of the attached "Drilling Operations Plan".
- 8. Anticipated Starting Dates and Notifications of Operations:

The operator will contact the San Juan Resource Area at 801-587-2141, 48 hours before beginning any dirt work.

No location will be constructed or moved, no well will be plugged, and no drilling or workover equipment will be removed from a well to be placed in a suspended status without prior approval of the District Manager. If operations are to suspended, prior approval of the District Manager will be obtained and notification given before resumption of operations.

The spud date will be reported orally to the San Juan Area Manager, a minimum of 24 hours <u>before</u> spudding. A Sundry Notice (Form 3160-5) will be sent within 24 hours after spudding, reporting the spud date and time. The Sundry will be sent to the District Manager. If the spudding is on a weekend or holiday, the Sundry will be submitted on the following regular work day.

In accordance with Onshore Oil and Gas Order No. 1, this well will be reported on Form 9-329 "Monthly Report of Operations," starting with the month in which operations begin and continue each month until the well is physically plugged and abandoned. This report will be sent to the BLM District Office, P. O. Box 970, Moab, Utah 84532.

Conditions of Approval for Permit to Drill Tin Cup Mesa #5-26 Page 3

Immediate Report: Spills, blowouts, fires, leaks, accidents, or any other unusual occurrences shall be promptly reported to the Resource Area in accordance with requirements of NTL-3A.

If a replacement rig is planned for completion operations, a Sundry Notice (Form 3160-5) to the effect will be filed, for prior approval of the District Manager. All conditions of this approved plan are applicable during all operations conducted with the replacement rig. In emergencies, verbal approval can be given by the District Petroleum Engineer.

If the well is successfully completed for production, then the District Manager will be notified when the well is placed in a producing status. Such notification will be sent by telegram or other written communication, not later than 5 business days following the date on which the well is placed on production.

No well abandonment operations will begin without the prior approval of the District Manager. In the case of newly drilled dry holes for failures, and in emergencies, oral approval will be obtained from the District Petroleum Engineer. A "Subsequent Report of Abandonment" (Form 3160-5), will be filed with the District Manager, within 30 days following completion of the well for abandonment. This report will indicate where plugs were placed and the current status of surface restoration.

Final abandonment will not be approved until the surface reclamation work required by the approved APD or approved abandonment notice has been completed to the satisfaction of the San Juan Area Manager, or the appropriate surface manager.

Approval to vent/flare gas during initial well evaluation will be obtained from the District Office. This preliminary approval will not exceed 30 days or 50 MMCF gas. Approval to vent/flare beyond this initial test period will require District Office approval pursuant to guidelines in NTL-4A.

Upon completion of the approved plugging, a regulation marker will be erected in accordance with 43 CFR 3162.6. The following information will be permanently beaded-on with a welding torch: Federal Well Number, location by 1/4 1/4 section, township and range, Lease number.

A first production conference will be scheduled within 15 days after receipt of the first production notice. The San Juan Area Manager will schedule the conference.

0+L	
Other:	

Conditions of Approval for Permit to Drill Tin Cup Mesa #5--26 Page 4

The following may be inspected and or witnessed:

- 1. The cementing and testing of surface casing, testing BOP's.
- 2. (Dry Hole) Setting and testing of surface casing shoe plug.
- 3. (Depleted Producer) The setting and testing of plugs across producing horizon and if applicable the surface casing shoe plug and/or annulus (casing to formation) squeeze jobs.

Notify the San Juan Resource area (Mike Wade) one day or on dry hole as soon as possible prior to the above at (801) 587-2141 (Home) (801) 587-2026 or if unable to reach Mike, call Moab District office Steve Jones (801) 259-6111.

MARATHON OIL COMPANY
Tin Cup Mesa #5-26
AFE #5-577-7
Drilling Operations Plan
1375' FNL, 1635' FEL,
Sec. 26, T38N, R25W
San Juan County, Utah
Elevation: 5111' KB (est.)
5095' GL

November 2, 1987

1. Geologic name of surface:

Jurrasic Morrison Formation

2. Estimated tops of important geologic markers:

<u>Formation</u>	Depth (K.B.)	Depth (From Sea Level)
Upper Ismay Hovenweep	5430' 5591'	-319' -480'
Lower Ismay Gothic	5623 5676'	-512' -565'
Desert Creek	5691'	-580'
Chimney Rock	5771'	-660 '
Akah	5791'	-680'
TD	5811'	-700 '

3. Estimated depths of anticipated water, oil, gas or other mineral bearing formations:

<u>Formation</u>	Depth (K.B.)	Possible Content
Upper Ismay	5430	Gas-Oil

4. Sample, logging, testing, and coring program:

DLL-GR-Cal from TD to surface casing with GR to surface.

FDC-CNL-GR-Cal from TD to surface casing.

BHC Sonic from TD to surface casing.

Fracture ID log from TD to surface casing.

No coring or testing is anticipated.

Samples will be caught, bagged, and dried in 30' intervals from 4300' to 5200' and then in 10' intervals to TD or as specified by the Company Representative.

5. Anticipated pressures or temperatures:

Maximum anticipated bottom hole pressure is 1600 psi.

Maximum anticipated bottom hole temperature is 136°F.

6a. The casing program including the size, grade, weight, whether new or used, and a setting depth of each string:

Min. Hole Size	Casing O.D.	Grade	Weight	Setting Depth	New or Used	Cplg
20" 12 <u>4</u> " 7 7/8"	16" 9 5/8" 5½" 5½"	X-42 K-55 K-55 K-55	42.0# 36.0# 15.5# 17.0#	80' 2,250' 5,300' 5,811'	New New New New	PE ST&C LT&C LT&C

6b. The cementing program including type, amounts, and additives:

9 5/8" Surface Casing

Cement Height: 2250' to surface

The casing will be cemented with 600 sacks blended light cement followed by 265 sacks of blended Class 'B' cement. If cement column falls, a l" top job will be performed. At least ten barrels of water will precede the cement slurry.

Lead Slurry: $1750' \times .3132 \text{ ft}^3/\text{ft} + 100\% \text{ excess} = 1096 \text{ ft}^3$

Weight: 12.7 ppg
Yield: 1.84 ft /sack
Mix Water: 9.9 gallons/sack

Cement Required: 600 sacks

Tin Cup Mesa #5-26 Page 3

6b. The cementing program: (continued)

Tail Slurry: $500' \times .3132 \text{ ft}^3/\text{ft} + 100\% \text{ excess} = 313 \text{ ft}^3$

Weight:

15.6 ppg

Yield:

1.18 ft³/sack

Mix Water:

5.2 gallons/sack

Cement Required:

265 sacks

Casing equipment will include a float shoe, a float collar and centralizers placed in the middle of the shoe joint and at the top of every third joint to surface. Waiting on cement time will be eight hours; casing is not to be disturbed until cement has fully set.

5 1/2" Production Casing

Cement Height: 366'

Cement Top: 2150'

The production casing will be cemented with 360 sacks of light-weight cement followed by 110 sacks of Class 'B' with 0.6% fluid loss additive.

The actual volume will be calculated from the caliper $\log + 25\%$ excess to place the cement top inside the surface casing.

Lead Slurry: $3061' \times .1733 \text{ ft}^3/\text{ft} + 25\% \text{ excess} = 663 \text{ ft}^3$

Weight:

12.7 ppg

Yield:

1.84 ft³/sack

Mix Water:

9.9 gal/sack

Cement Required:

360 sacks

Tail Slurry: $600' \times .1733 \text{ ft}^3/\text{ft} + 25\% \text{ excess} = 130 \text{ ft}^3$

Weight:

15.6 ppg

Yield:

1.18 ft³/sack

Mix Water:

5.2 gal/sack

Cement Required:

110 sacks

Casing equipment will include a float shoe, a float collar and centralizers at one per joint from TD to 200' above the Ismay and spaced every third joint to surface casing. Cable type scratchers will be run every 15' from TD to 200' above the Ismay. After cementing, the casing will be landed in the head with the full weight of the casing string set in the slips.

Final cement volumes will be calculated from the Caliper log.

Tin Cup Mesa #5-26 Page 4

B.O.P. specification and testing: 7.

A 16" hydril and diverter system will be used while drilling the surface hole.

BOP equipment will include pipe and annular preventer. All equipment while drilling below surface casing will have a minimum working pressure of 5000 psi. The accumulator will be of sufficient size to open and close all components without using the pump. The minimum testing requirements will be as follows:

a) All ram-type preventers will be tested to the rated working pressure of the stack or to 70% of the internal yield of the casing, whichever is less.

The annular-type preventer will be tested to 50% of its rated

working pressure.

c) Tests will be run at the time of installation and following repairs, prior to drilling out of each casing shoe, and at least every 30 days.

Mud Program and anticipated pressures: 8.

From	To	Type Mud	Weight	<u>Vis.</u>	<u>0il %</u>	Water Loss
0' 2250' 5000' Logging Cementing	2250' 5000' TD	Water/Gel Chem-Gel Chem-Gel Chem-Gel Chem-Gel	8.5 8.5-9.0 8.5-9.0 8.5-9.0	36-40 38-41 41-45 50-55 32-36	0 0 0 0	No Control 15-20 12-15 12-15 12-15

Treatment of the anhydrite section above the Ismay may be necessary to maintain good mud qualities.

Type of drilling tools and auxiliary equipment:

A. A kelly cock of 5000 psi WP will be used.

A pit volume indicator, mud flow indicator, and pump pressure

recorder will be used.

A 5000 psi working pressure full opening safety valve will be available to stab into the drill pipe when necessary if the kelly is not in the string.

Casing strings - "All casing strings shall be pressure tested (0.2 psi/ft. or 1000 psi, whichever is greater) prior to drilling the plug after cementing; test pressure should not exceed 70% of the casing's internal yield pressure.

E. A drilling rate recorder calibrated to record drilling time for each one foot interval will be used.

9b.	Devia	tion Co	ntrol:								
	Surfac	ce Loca	tion:	1375'	FNL,	1635'	FEL,	Sec. 26	, T385	S, R25E	
	From	<u>To</u>						eviation rtical		imum Ch 100' of	
	0'	2250'		250'				2°		٦°	
	2250'	TD		1000'			Т	ВА	4	TBA	
	The w	ellbore	will	be al	lowed	to dr	ift n	aturally	•	•	
10.	The a	nticipa	ted du	ıratio	n:	13	Days	i		•	
REGI	ON APP	ROVAL		·							
Appr	oved					Da	<u>te</u>				
<u>Orig</u>	inator	:									
THC:											
FFS:	7.7	Arte	Lr		11/4/	187					
TNT:								-			
DRT:											
WTR:						· · · · · · · · · · · · · · · · · · ·					
DES:			 								
JLM:											
RJD:		 									
JRK:		i-									

CASING DESIGN
Tin Cup Mesa #5-2**5**AFE #_5-577-7 Well_

Fize Depth T.O.C. O.D. Britt Grade W.E.WITE Column Nating Each STA Column Nating Each STA Column Nating Each STA Column Nating Each STA Column STA Column		•										,		1561	Daniel	120		i
31ze Depth T.O.C. O.D. Drift Grade Wt.#/ft Conn. Rating Goad 3.1. Rating Edg SH1 250 Surface 9.625 8.765 K-55 36# ST&C 423 70.5 6.0 2020 1170 1.7 3387 2200 7 7/8 5300 2150 5.5 4.925 K-55 15.5 LT&C 239 77.1 3.1 4040 3100 1.3 4671 3538 7 7/8 5811 2150 5.5 4.767 K-55 17 LT&C 272 7.2 37.7 4910 3324 1.4 5090 3530 8 1	lo le	Shoe		Casing						on - 100	00 lbs		apse -	1/51		- 131	S.F.	ĺ
12½ 2250 Surface 9.625 8.765 K-55 36# ST&C 423 70.5 6.0 2020 1170 1.7 3387 2200		Depth	T.O.C.	0.D.	Drift	Grade	Wt.#/ft	Conn.	Rating	Load	S.F.	Kating	Load	3.1.	na ciny	Long	3.1.	İ
7 7/8 5300 2150 5.5 4.325 K-55 15.5 LT&C 239 77.1 3.1 4040 3100 1.3 4671 3538 7 7/8 5811 2150 5.5 4.767 K-55 17 LT&C 272 7.2 37.7 4910 3324 1.4 5090 3530			1	ı	B .	K-55	36#	ST&C	423	70.5	6.0	2020	1170	1.7	3387	2200	1.5	
7 7/8 5300 2150 5.5 4.325 K-55 15.5 LT&C 239 77.1 3.1 4040 3100 1.3 4671 3538 7 7/8 5811 2150 5.5 4.767 K-55 17 LT&C 272 7.2 37.7 4910 3324 1.4 5090 3530	124	2250	5411400				-									·		١
7 7/8 5300 2150 5.5 4.325 K-55 15.5 LTaC 239 77.1 5.1 4010 3324 1.4 5090 3530 77.18 5811 2150 5.5 4.767 K-55 17 LTaC 272 7.2 37.7 4910 3324 1.4 5090 3530										<u> </u>		ļ. <u></u>			-			
7 7/8 5811 2150 5.5 4.767 K-55 17 LT&C 272 7.2 37.7 4910 3324 1.4 5090 3530	7 7/8	5300	2150	5.5	4.325	K-55	15.5	LT&C	239	77.1	3.1	4040	3100	1.3	4671	3538	1.3	
		-	 	5.5	4 767	K-55	17	LT&C	272	7.2	37.7	4910	3324	1.4	5090	3530	1.4	1
	1 1/0	3011	·	1-3.5	14.707		-											'
												_	\	<u> </u>	-		·	
																	_	
	 					-			-									
										-					_	\ <u></u>	-	1
		·								1			,					
									_									
	-										<u> </u>		<u> </u>	-	-		-	1
											·							
		ļ	_	-			_	-										
		1								_		_			_	-	-	-
		ļ	-	-		-	_			-			· ·					
											1		<u> </u>	_	1	<u> </u>	_L	

AFE #5-577-7

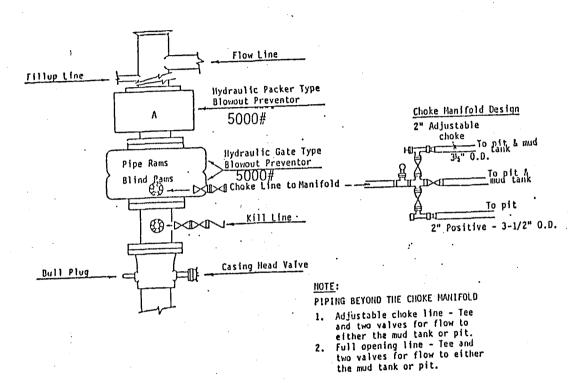


Exhibit 'D'

1. Blowout preventors, master valve, plug valves, and all fittings must be in good condition.
Use new API seal rings.

2. All fittings (gates, valves, etc.) to be of equivalent pressure rating as preventors. Valves to be flanged and at least 2" unless otherwise specified. Valves next to BOP to be plug type and nominal 3".

Equipment through which bit must pass shall be as large as the inside diameter of the casing

that is drilled through.

4. Safety valve (OMSCO or equivalent) must be available on rig floor at all times and with proper connections. The ID of safety valves should be as great as ID of tool joints or drill pipe.

6. Kelly safety valve installed, same working

pressure as BOP.

6. All lines and controls to preventors must be connected and tested before drilling out of surface pipe.

7. BOP's must be fluid operated, complete with accumulator. Controls may be either on floor

or ground near steps from rig floor.

8. Fillup line tied to drilling nipple, the connection must be below and approximately 90° to the flow line.

Gauge will be installed for testing but removed.

while drilling.

10. Casinghead and casinghead fittings to be furnished by Marathon Oil Company.

11. Chokes must be adjustable and positive.

12. One side of casinghead may be bull plugged.

WHEN DRILLING -- USE:

Top preventor -- Drill pipe rams. Bottom preventor -- Blinds rams.

WHEN RUNNING CASING -- USE:

Top preventor -- Casing rams.
Bottom preventor -- Blind rams.

BLOWOUT PREVENTION POLICY

- 1. Light Plant will be located a mimimum of 125' from the well.
- 2. Rig will be equipped with a vapor proof lighting system. A switch panel will be located on rig floor to provide sufficient circuits for maintaining light on rig floor and under the substructure during blowout. All other lights will be out in the event of a blowout.
- 3. Engine exhausts will be horizontal and equipped with a remote operated spray system.
- 4. Pump and drawworks engines will have a remote ignition 'kill' system readily accessible to the driller.
- 5. All vehicles will be parked at least 125 feet from the well unless supplying rig material.
- 6. The Contract Pusher will instruct each man of his duties in case of an emergency and inform Marathon of these duties.
- 7. The Contract Pusher on each rig will have blowout preventer and fire drills with each crew once each week and note same in Marathon Log Book.
- 8. The Contract Pusher will instruct derrickman in the use of the Geronimo.
- 9. Gate type blowout preventers and choke manifold valves will be operated on each trip out for a new bit and so noted in the log book. All valves will be equipped with handles.
- 10. Blowout preventers will stay in place and be operable until casing is cemented and packing and slips are in place.
- 11. The choke line will be cleaned from the BOP's to the pit immediately under surface and once a week thereafter.
- 12. Manual handles must be on blowout preventers.
- 13. The pipe from the blowout preventer to the choke manifold will be kept free of all sharp bends.
- 14. The choke manifold will be out from under the rig floor and braced.
- 15. Choke lines will run straight from rig and be tied down.
- 16. The choke lines will be run to the reserve pit and/or mud tank as indicated on the attached Exhibit.

THIRTEEN POINT SURFACE USE PLAN Tin Cup Mesa #5-26

1. Existing Roads:

- a. Location of proposed well in relation to town or other reference point: See vicinity map Exhibit 'A' and the well location in relation to Hatch Trading Post, Utah.
- b. Proposed route to location: County roads, see vicinity map Exhibit 'A'.
- c. Plans for improvement and/or maintenance of existing roads: The roads will be maintained in as good or better condition than they now exist.
- d. An encroachment permit will be obtained from the San Juan County Road Dept., (801) 587-2231, ext. 43.
- e. Other: Permit is presently being obtained.

2. Planned Access Roads:

- a. The maximum total disturbed width will be 30 feet for 1/4 miles.
- b. Maximum grade: N/A
- c. Turnouts: N/A
- d. Location (centerline): Flagged during onsite.
- e. Drainage: One 18" culvert will be placed where the new access road will leave the Tin Cup Mesa #4-26 location.
- f. Surface Materials: If access is utilized during wet winter weather, road surfacing may be required to prevent road maintenance problems.
- g. Other: Pit run will be used for road surfacing.

Surface disturbance and vehicular travel will be limited to the approved location and approved access route. Any additional area needed will be approved in advance by the San Juan Area Manager.

The access road will be water barred or brought to Class III Road Standards within 60 days of dismantling of the drill rig. If this time frame cannot be met, the San Juan Area Manager will be notified so that temporary drainage control can be installed along the access road.

The Class III Road Standards which ensure drainage control over the entire road through the use of natural, rolling topography; ditch turnouts; drainage dips; outsloping; crowning; low water crossings; and culverts will be determined at the appropriate field inspection.

3. Location of Existing Wells:

See Exhibit 'C'.

4. Location of Tank Batteries and Production Facilities:

All permanent (on site for 6 months or longer) above ground facilities (including pump jacks) will be painted a flat, nonreflective, earthtone color to match the standard environmental colors, as determined by the Rocky Mountain 5-State Interagency Committee. All facilities will be painted within 6 months of installation. Facilities required to comply with the Occupational Safety and Health Act (OSHA) will be excluded. The color will be Sandstone.

If a tank battery is constructed on this lease, it will be surrounded by a dike of sufficient capacity and contain 1-1/2 times the storage capacity of the largest tank within the battery.

All loading lines will be placed inside the berm surrounding the tank battery.

All site security guidelines identified in 43 CFR 3162.7 regulations will be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed.

All off-lease storage, off-lease measurement, or commingling on-lease or off-lease will have prior written approval from the District Manager.

Gas meter runs for each well will be located within 500 feet of the wellhead. The gas flowline will be buried from the wellhead to the meter and 500 feet downstream of the meter run or any production facilities. Meter runs will be housed and/or fenced.

The oil and gas measurement facilities will be installed on the well location. The oil and gas meters will be calibrated in place before any deliveries. Tests for meter accuracy will be conducted monthly for the first 3 months on new meter installations and at least quarterly thereafter. The San Juan Area Manager will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration reports will be submitted to the San Juan Area Manager. All meter measurement facilities will conform with the API standards for liquid hydrocarbons and the AGA standard for natural gas measurement.

5. Location of Type of Water Supply:

All water needed for drilling purposes will be obtained from: A nearby artesian well, refer to Exhibit 'C' for water haul route.

Use of water for this operation will be approved by obtaining a temporary use permit from the Utah State Engineer, (801) 637-1303 and by receiving permission from the land owner or surface management agency to use the land containing the water source.

6. Source of Construction Material:

Pad Construction material will be obtained from: Native material

The use of materials under BLM jurisdiction will conform to 43 CFR 3610.2-3.

7. Methods of Handling Waste Disposal:

The reserve pit will not be lined with commercial bentonite sufficient to prevent seepage. At least half of the capacity will be in cut. However, if determined by the dirt contractor that the pit needs line, it will be line with bentonite.

Three sides of the reserve pit will be fenced with four strands of barbed wire before drilling starts. The fourth side will be fenced as soon as the drilling is completed. The fence will be kept in good repair while the pit is drying.

A trash pit or cage will be constructed near the mud tanks and dug at least six feet into solid undisturbed material. It will be totally enclosed with a fine wire mesh before the rig moves in. The road and pad will be kept litter free.

A burning permit is required for burning trash between May 1 and October 31. This can be acquired by notifying the San Juan County Sheriff at (801) 587-2237.

Produced waste water will be confined to an unlined pit for a period not to exceed 90 days after initial production. During the 90 day period an application for approval of a permanent disposal method and location, along with the required water analysis, will be submitted for the District Manager's approval pursuant to Onshore Oil and Gas Order No. 3 (NTL-2B).

8. <u>Ancillary Facilities</u>:

Camp facilities will not be required.

9. <u>Well Site Layout</u>:

The reserve pit will be located: See Exhibit 'J'

The top 2-3 inches of soil material will be removed from the location and stockpiled separate from the trees on the North and Southeast sides. Topsoil along the access will be reserved in place.

Access to the well pad will be from: A new access road from the Tin Cup Mesa #4-26 location leading to the new well site. The new well site will be entered from the South.

10. Reclamation:

- a. Immediately on completion of drilling, all trash and debris will be collected from the location and surrounding area. All trash and debris will be disposed of in the trash pit and will then be compacted and buried under a minimum of two feet of compacted soil.
- b. The operator/holder or his contractor will contact the San Juan Resource Area office in Monticello, Utah (801) 587-2141, 48 hours before starting reclamation work that involves earthmoving equipment and upon completion of restoration measures.
- c. Before any dirt work to restore the location takes place, the reserve pit must be completely dry.
- d. All disturbed areas will be recontoured to blend as nearly as possible with the natural topography. This includes removing all berms and refilling all cuts.
- e. The stockpiled topsoil will be spread evenly over the disturbed area. All disturbed areas will be ripped 12 inches deep with the contour.
- f. Water bars will be built as follows to control erosion.

<u>Grade</u> <u>Spacing</u>				
2%	Every 200 feet			
2-4%	Every 100 feet			
4-5%	Every 75 feet			
5+%	Every 50 feet			

g. Seed will be broadcast between October 1 and February 28 with the following prescription. A harrow or similar implement will be dragged over the area to assure seed cover.

lbs/acre lbs/acre lbs/acre lbs/acre lbs/acre lbs/acre	Indian ricegrass (Oryzopsis hymenoides) Galleta (Hilaria jamesii) crested wheatgrass (Agropyron desertorum) Western wheatgrass (Agropyron smithii) Alkali sacaton (Sporobolus airodies) Sand dropseed (Sporobolus cryptandrus) Fourwing saltbush (Atriplex canenscens)
1bs/acre	Shadscale (Atriplex confertifolia)
lbs/acre	Green ephedra (<u>Ephedra viridis</u>) Cliffrose (<u>Cowania mexicana</u>) Desert bitterbrush (<u>Purshia gladulosa</u>)

	lbs/acre	Winterfat (Eurotia lanata)
		Globemallow (Sphaeralcea ambigua)
	lbs/acre	Wild sunflower (Helianthus annuus)
1/2	1bs/acre	Yellow Sweet Clover

- h. After seeding is complete, the stockpiled trees will be scattered evenly over the disturbed areas. The access will be blocked to prevent vehicular access.
- i. The reserve pit and the portion of the location and access road not needed for production or production facilities will be reclaimed as described in the reclamation section. Enough topsoil will be kept to reclaim the remainder of the location at a future date. This remaining stockpile of topsoil will be seeded in place using the prescribed see mixture.
- 11. Surface Ownership: BLM

Mineral Ownership: Federal

12. Other Information: The proposed injection line will parallel the new access road to Tin Cup Mesa #4-26 and then parallel the existing injection line right-of-way to the Tin Cup Mesa Gas Facility (Surface Disturbance will be an additional 30' width).

There will be no change from the proposed drilling and/or workover program without prior approval from the District Manager. Safe drilling and operating practices must be used. All wells, whether drilling, producing, suspended, or abandoned will be identified in accordance with 43 CFR 3162.2.

"Sundry Notice and Report on Wells" (Form 3160-5) will be filed and approval for all changes of plans and other operations in accordance with 43 CFR 3164.

The dirt contractor will be provided with an approved copy of the surface use plan.

If subsurface cultural materials are exposed during construction, work in the spot will stop immediately and the San Juan Resource Area Office will be contacted. All people who are in the area will be informed by the operator/holder that they are subject to prosecution for disturbing archeological sites or picking up artifacts. Salvage or excavation of identified archeological sites will be done by a BLM approved archeologist only if damage occurs.

This permit will be valid for a period of one year from the date of approval. After permit termination a new application will be filed for approval for any future operations.

Your contact with the District Office is: Steve Jones Office Phone: (801) 259-6111, Address: P. O. Box 970, Moab, UT 84532

Resource Area Manager's address and contacts: Address: P. O. Box 7, Monticello, UT 84532

Your contact is: Richard McClure Office Phone: (801) 587-2141

13. <u>Lessee's or Operator's Representation and Certification</u>

Representative

Name: Fred Schneider

Address: P. O. Box 2690, Cody, Wyoming 82414

Phone No.: (307) 587-4961

Certification:

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which currently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by Marathon Oil Company and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

November 6, 1987

Date

Regulatory Coordinator

Name and Title

ON-SITE

DATE: September 28, 1987

PARTICIPANTS:

Jim Perkins & Lou Jobe - Surveyors

Bob Coleman - Marathon

Patrick Harden - Archeologist

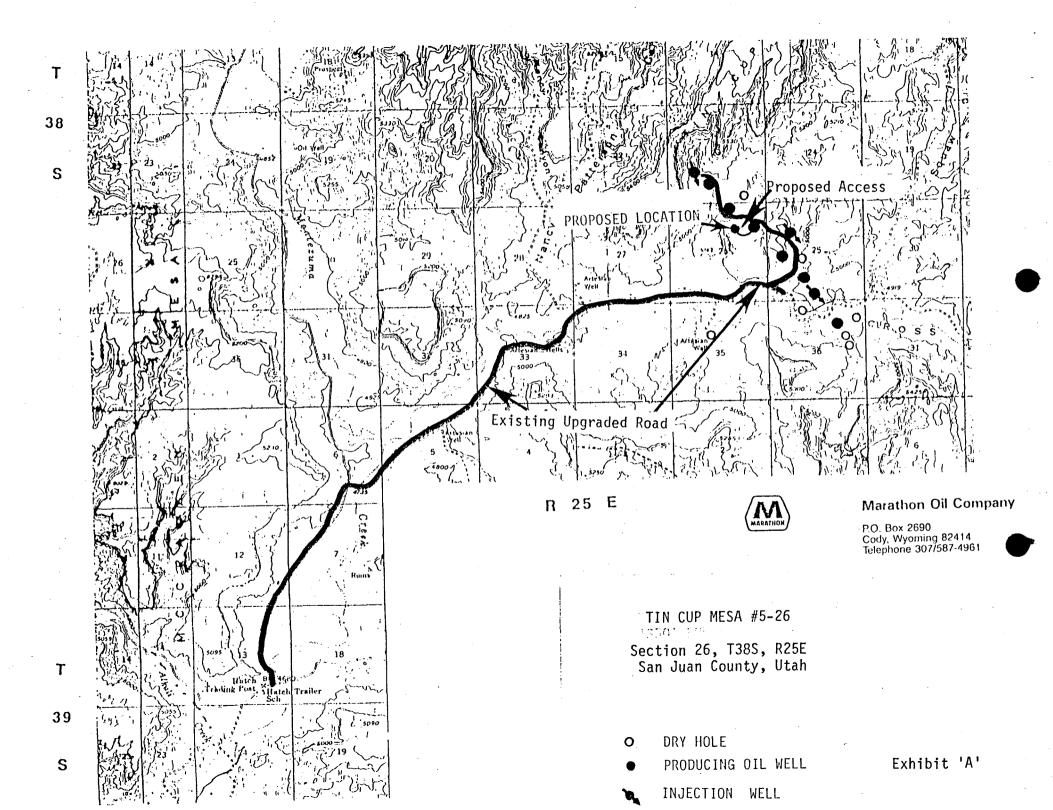
Joe Icenogle - Marathon

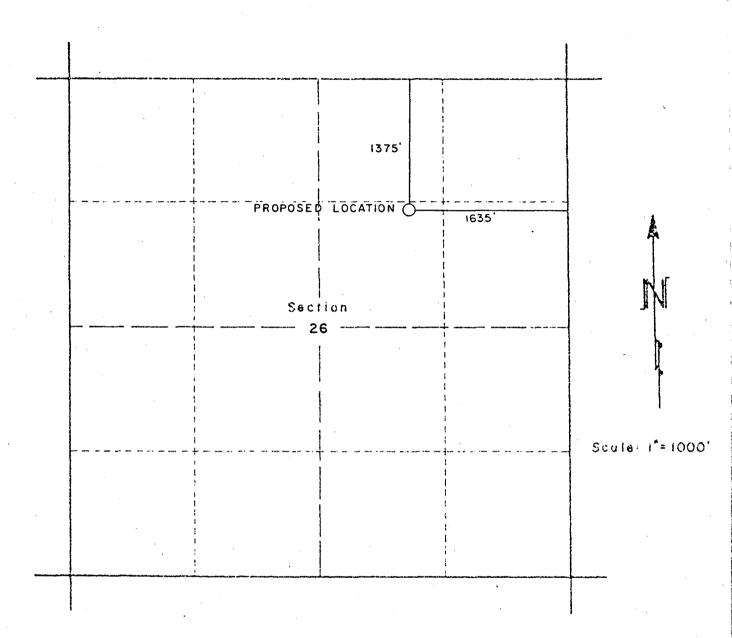
Howard Hughes - Dirt Contractor

Richard McClure - BLM

Jim VanGilder - Marathon

Jim Barto - Marathon





WELL LOCATION: MARATHON OIL CO. - TIN CUP MESA No. 5-26

. Located 1375 feet south of the North line and 1635 feet West of the East line of Section 26 Township 38 \ South Range 25 East Salt Lake

Existing ground elevation determined at 5101 feet based on Well No. 3-26,

i hereby certify they obove plot represents a survey model under my supervision and that it is acquirite

FREDERICK H. REED

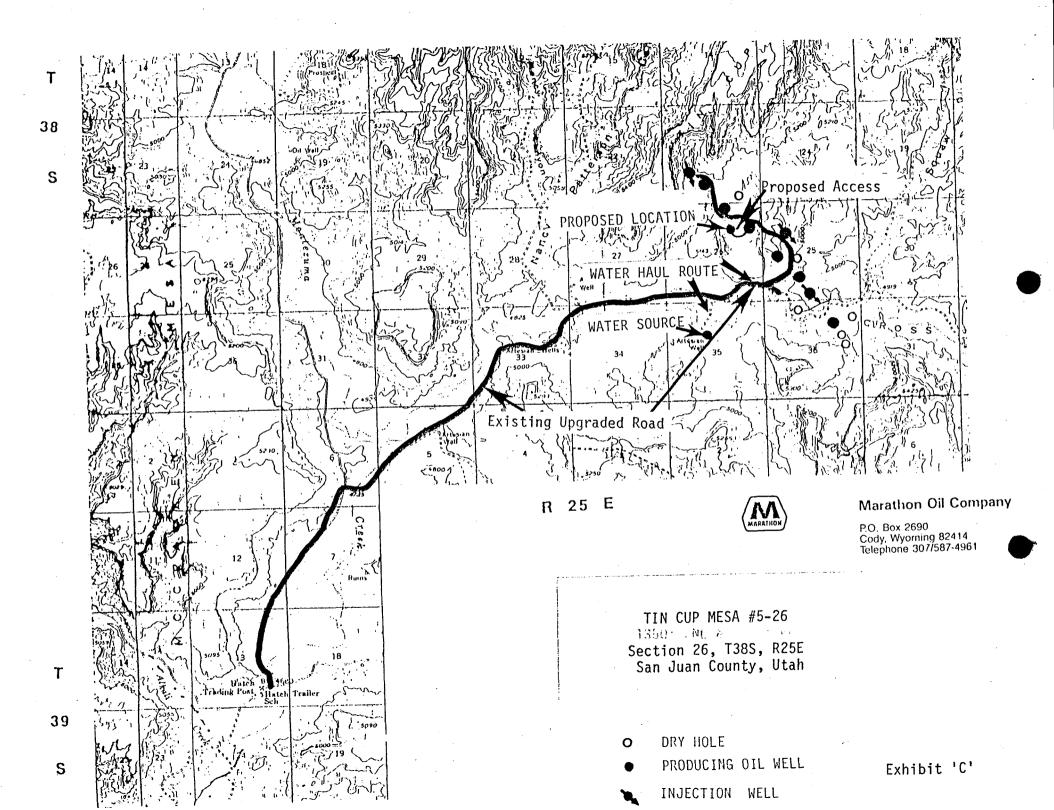
Exhibit 'B'

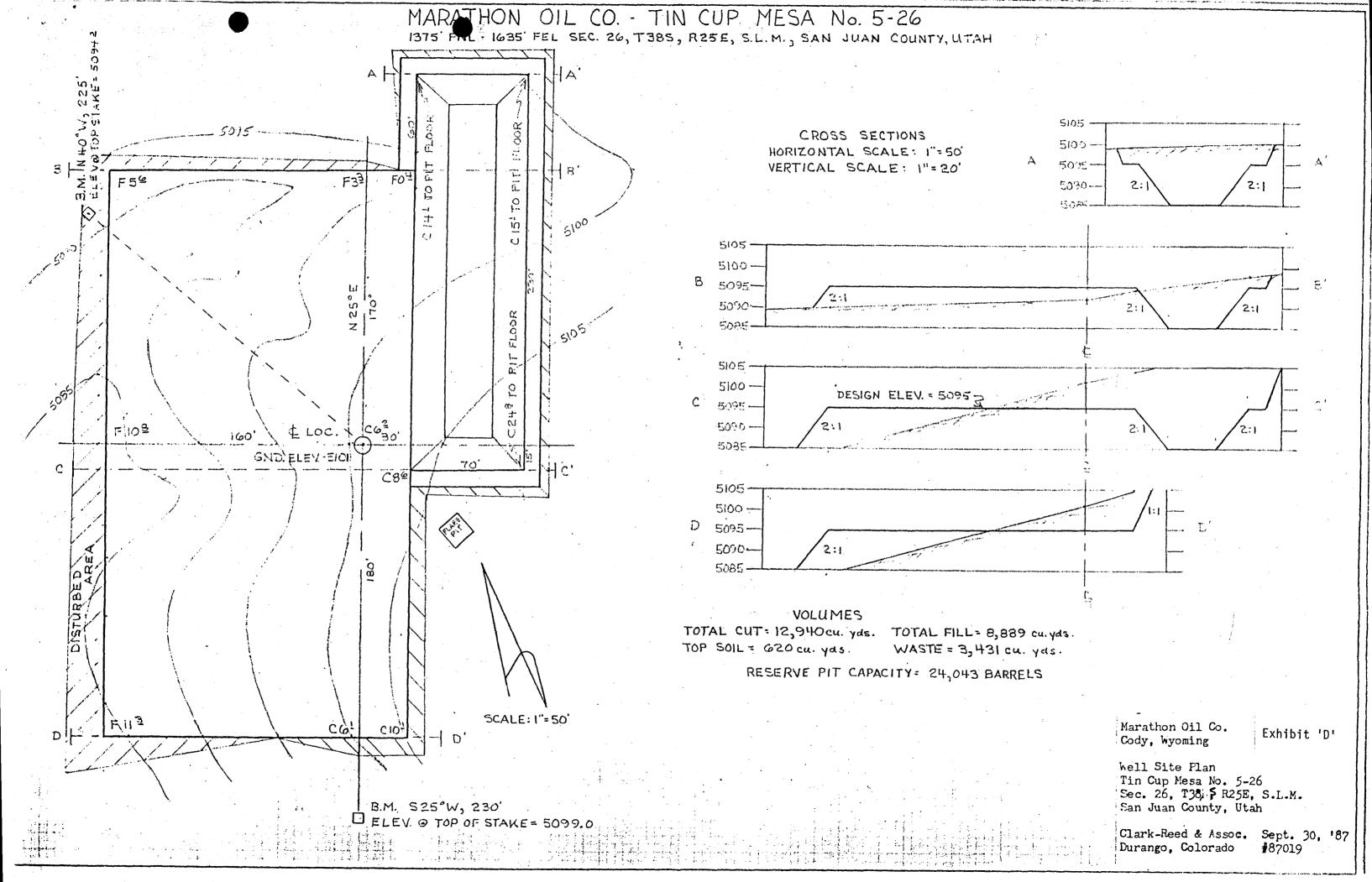
MARATHON OIL CO. Cody, Wyoming

WELL LOCATION PLAT Tin Cup Mes& No. 5-26 Sec. 26, T385, R25 E San Juan County, Utah

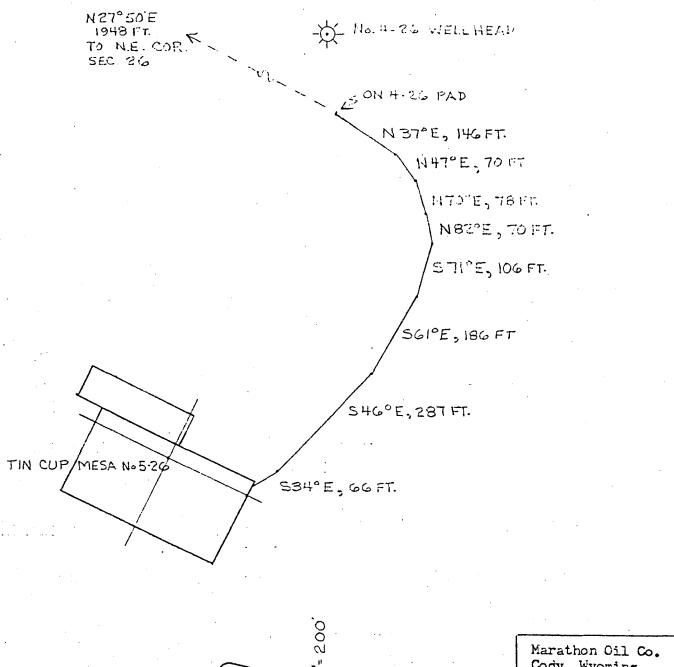
Truckenge , Columbia

CLARK - RELU & ASSOC | CATE: Sept. 30, 1987





TIN CUP MESA No. 5-26 Access Rb.

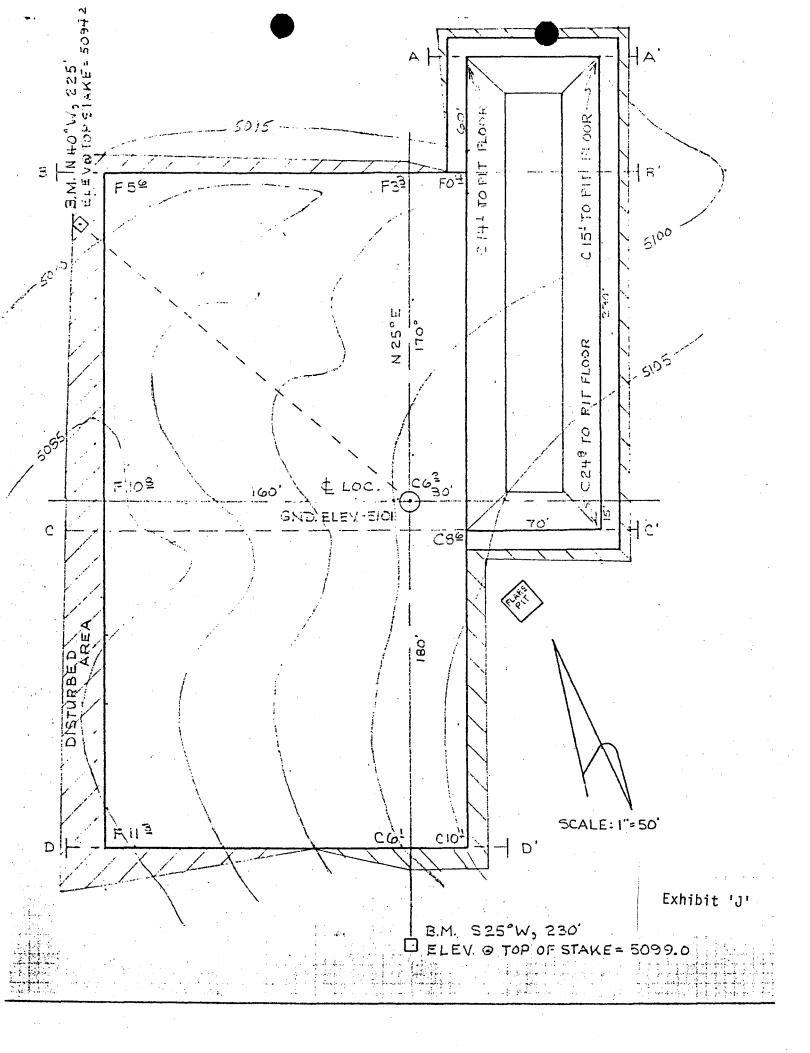


Cody, Wyoming

Tin Cup Mesa No. 5-26 Access Road

Clark-Reed & Assoc. #87019

Exhibit 'E'



SAN JUAN COUNTY ROAD DEPARTMENT

Application for Right-of-Way Encroachment Permit

DATE: October 7, 1987	NOV 0 9 198
TO: Road Supervisor San Juan County Road Department	DIVISION OF OIL, GAS & MINI
Application is hereby made by: (1) Mara	thon Oil Company
Address (2) P. O. Box 2690, Cody, Wyomi Telephone Number: (307) 587-4961 (3) To utilize San Juan County roads and drilling and maintenance of our propos	id rights-of-ways during the construction
(4) Location: From Hatch Trading Post, S	ec. 13, T39S, R24E, leading Northeast
to the wellsite, Tin Cup Mesa #5-26 lo	cated in Sec. 26, T38S, R25E.
(See Attached Map).	
City County	San Juan State Utah
or U. S. Highway No. 220	Milepost No. N/A
in accordance with the attached plan.	(5)
(6) Construction will begin on or about	November 7. 19 87
and will be completed on or before	
	ires Breaking of the pavement, give
a. Type of pavement:	N/A
b. The opening to be made will be	N/A feet long
by N/A feet wide and	N/A feet deep.
c. A bond in the amount of \$N	has been posted with
	Telephone No,
to run of a term of three (3) years aft satisfactory performance.	er completion of work to guarantee
(7) If this permit is granted, we agre restriction, and regulations as contain nad Protection of State Highway Rights-Road Commission on October 8, 1962, and adopted by the San Juan County Commission	ed in the "Regulations for the Control of-Way", approved by the Utah State all revisions thereto or Regulations
(8) In approving this application and effort will be made to approve only locathe event that San Juan County changes which the utility has to be moved, this	ations that will not be effected in the roadway. But, in situations in

- (9) For any and all applications requesting authority to Vibroseise, applicants shall:
 - a. Provide map showing where vibroseising will take place.
 - b. Agree to repair any damages or replace any property damaged.
 - c. Take full responsibility or proper flagging and traffic control.

d. Agree that Vibroseising done in the area of dirt roads shall done on the dirt road rather than in the bar ditch to minimize damage. e. Provide a schedule of the planned work and estimated dates of completion. Attach written permission form all adjacent fee-title owners. g. The San Juan County Commission has authorized the San Juan County Road Superintendent (or his Assignees) to issue permits. (10) San Juan County can only grant permission to the extent that the County has the aurhority to do so and the permission granted hereunder is limited to the interest of authority actually owned by San Juan County and no warranties of ownership or authority to grant permission is expressed or implied b the granting of this permit. Regulatory Coordinator TITLE To be filled in by Road Supervisor. (1) Permit should be granted Permit should not be granted Additional requirements which should be imposed. MIL Hugestobler INSTRUCTIONS *Application for this permit should be made in duplicate by whoever will actually do the work whether it be the owner or a contractor. (2) Mailing address of applicant. (3) State fully and completely the type or installaion, type of construction, width, thickness, drainage data, etc., where applicable. If pole line, give the following information: number of poles, total length of line, type of wire, character of service, vertical clearance over roadway, and voltage of power line. (4) If pipe line or buried cable, give the follwing information: Type of service, size and length of line, depth of trench, kind of pipe, (sewer, gas, oil, water supply, etc.) or conduit, and if pipe is to be driven or if pavement will be broken. All fluid lines requires encasement with suitable material. The size and length of encasement shall be satisfactory to the State Department of Transportation, San Juan County Road Supervisor or his agent. (5) Give distance from some geographical point such as intersecting highways, city, or coporate limits. Give city, county, and state or U. S. route number. (6) Attach two (2) copies of a plan showing proposed location of structures with reference of pavement and right-of-way lines. If installation crosses the highway, show cross section of present roadway and proposed installation. (7) Give anticipated dates for beginning and for completion of proposed installation. Note: A fee of five (5) dollars will be charged for all Right-of-Way Encroachments Permits, except those obtained for pole lines, and buried cable lines. This Permit fee, where applicable, should be submitted with the application. The costs of inspection are included in the Right-of-Way Encroachment Permit fee, except for pole lines, pipe lines, and buried cable lines which shall be billed for the inspection.

STATE OF UTAH

NOTE:-The information given in the following blanks should be free from explanatory matter, but when necessary, a complete supplementary statement should be made on the following page under the heading "Explanatory."

For the purpose of acquiring the right to use a portion of the unappropriated water of the State of Utah, for uses indicated by (X) in the proper box or boxes, application is hereby made to the State Engineer, based upon the following showing of facts, submitted in accordance with the requirements of the Laws of Utah.

1.	Irrigation 🗌 Domestic 🗀 Stockwatering 🗀 Municipal 🗀 Power 🗀 Mining 🗀 Other Uses 🖾
2.	The name of the applicant is Marathon Oil Company
3.	The Post Office address of the applicant is P. O. Box 2690, Cody, Wyoming 82414
1 .	The quantity of water to be appropriatedsecond-feet and/or3.5acre-feet
5.	The water is to be used for <u>Oil Well Drilling</u> from <u>November 1, 1987</u> o <u>November 1, 1988</u> (Major Purpose) (Month) (Day) (Month) (Day)
	other use period
	and stored each year (if stored) from
6.	The drainage area to which the direct source of supply belongs is
0.	(Leave Blank)
7.	The direct source of supply is* An artesian well. Sec. 35, T38S, R25E
	(Name of stream or other source) which is tributary to, tributary to
	which is tributary to, tributary to
first s space. may divert	*Note.—Where water is to be diverted from a well, a tunnel, or drain, the source should be designated as "Underground Water" in the space and the remaining spaces should be left blank. If the source is a stream, a spring, a spring area, or a drain, so indicate in the first, giving its name, it named, and in the remaining spaces, designate the stream channels to which it is tributary, even though the water sink, evaporate, or be diverted before reaching said channels. If water from a spring flows in a natural surface channel before being ted, the direct source should be designated as a stream and not a spring. The point of diversion from the source is in
SE ₂	NW1 Sec. 35, T38S, R25E
west in at a g divers	Note.—The point of diversion must be located definitely by course and distance or by giving the distances north or south, and east or with reference to a United States land survey corner or United States mineral monument, if within a distance of six miles of either, or if treater distance, to some prominent and permanent natural object. No application will be received for filing in which the point of ion is not defined definitely. The diverting and carrying works will consist of <u>pumping water from the artesian well</u>
10.	If water is to be stored, give capacity of reservoir in acre-feetheight of damarea inundated in acreslegal subdivision of area inundated
	If application is for irrigation purposes, the legal subdivisions of the area irrigated are as follows:
**	
19	Is the land owned by the applicant? Yes No X If "No," explain on page 2.
15.	Is this water to be used supplementally with other water rights? YesNoX
14.	If "yes," identify other water rights on page 2. If application is for power purposes, describe type of plant, size and rated capacity.
1 5	If application is for mining, the water will be used inMining District at
15.	the mine, where the following-ores are mined
16.	If application is for stockwatering purposes, number and kind of stock watered
17.	If application is for domestic purposes, number of persons or families
18.	If application is for municipal purposes, name of municipality.
	If application is for other uses, include general description of proposed uses Oil Well Drilling
i ing pangangan Tanggan	Give place of use by legal subdivision of the United States Land Survey for all uses described in paragraphs 14 to 19, incl. SER NER Sec. 26, T38S, R25E proposed wellsite for Iin Cup Mesa. 26. (See attached map for source and haul route).
21	The use of water as set forth in this application will consume 3.5 second-feet and/or acrefeet of water and 0 second feet and/ or acre feet will be returned to the natural stream or source at a point described as follows:

EXPLANATORY

aragraph #7	- Underground Water (artesian well)	
aragraph #8	- San Juan County, SE NW of Sec 35, T38S, R25E, S.1975 ft. and from N ¹ / ₂ Corner Sec. 35, T38W, R25E SLM&B.	W.565 ft.
		·
)
aragraph #1	2 - Surface and mineral rights owned by U. S. Government	
		:
•	•	· · · · · · · · · · · · · · · · · · ·
	(Use page 4 if additional explanatory is needed.)	
	The quantity of water sought to be appropriated is limited to that which can be beneficially used for the purpose herein described	
,÷	Regulatory Co Signature of Applicant*	ordinator
he ite propos of	nt is a corporation or other organization, signature must be the name of such corporation of ficer, or in the name of the partnership by one of the partners, and the names of the other corporation or partnership, the affidavit below need not be filled in. If there is more than brney, authorizing one to act for all, should accompany the Application.	martners sha
	DECLARATION OF CITIZENSHIP	
	TAH, ss	
notary public f	day of	ed before me, United State
My commission	expires:	

ARCHEOLOGICAL SURVEY OF MARATHON OIL COMPANY'S TIN CUP MESA 5-26 WELL, ACCESS ROAD, & PIPELINE, SAN JUAN COUNTY, UTAH

LAC REPORT 87111

by Patrick L. Harden

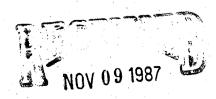
LA PLATA ARCHEOLOGICAL CONSULTANTS, INC. P.O. BOX 783 DOLORES, COLORADO 81323 (303) 882-4933

OCTOBER 13, 1987

FEDERAL ANTIQUITIES PERMIT 85UT57626 UTAH STATE PERMIT U87-LA-587b

Prepared For:

Marathon Oil Company P.O. Box 2690 Cody, Wyoming 82414



CIL, GAS & MINING

ABSTRACT

The archeological survey of Marathon Oil Company's Tin Cup Mesa 5-26 well pad, ca. 1200 feet of access road, and a ca. 1500' pipeline route was conducted by personnel of La Plata Archeological Consultants, Inc. on September 28, 1987. The project is located on lands administered by the Bureau of Land Management in San Juan County, Utah. An area 660 X 660 feet surrounding the well center stake and a 100' wide corridor along the access road and pipeline route were inventoried for cultural resources. One archeological site was found. This site is outside of the project area per se and in no danger of being disturbed. Archeological clearance for the project is recommended.

INTRODUCTION

On September 28, 1987 the archeological survey of Marathon Oil Company's Tin Cup Mesa 5-26 well pad, a ca. 1200' foot long access route, and a 1500' long pipeline route was conducted by Patrick Harden of La Plata Archeological Consultants, Inc. The survey was requested by Mr. Frank Krugh of Marathon. The proposed project consists of the construction of a single well pad ca. 275 X 325' in size, a ca. 1200' access road, and a pipeline ca. 1500' in length. The pipeline will parallel the access road to the 5-26 well, then follow other Marathon pipelines to the tank battery. The total length of the pipeline will be ca. 2700'. The access road will connect the 5-26 well to another Marathon well in the SE 1/4 of the NE 1/4 of section 26. The project is located in San Juan County, Utah on lands administered by the Bureau of Land Mangement - San

Juan Resource Area. The well is in the NE 1/4 of section 26, T38S, R25E. The pipeline is in the NE 1/4 of section 26, and terminates at Marathon's tank battery in the NW 1/4 of section 25. The area is included on the Hatch Trading Post 7.5' series topographic map (1985).

PHYSIOGRAPHY AND ENVIRONMENT

The project is located near the southeast end of Tin Cup Mesa in undulating terrain. The well is located primarily on a moderate ridge slope, while the access road and pipeline are mostly in undulating terrain.

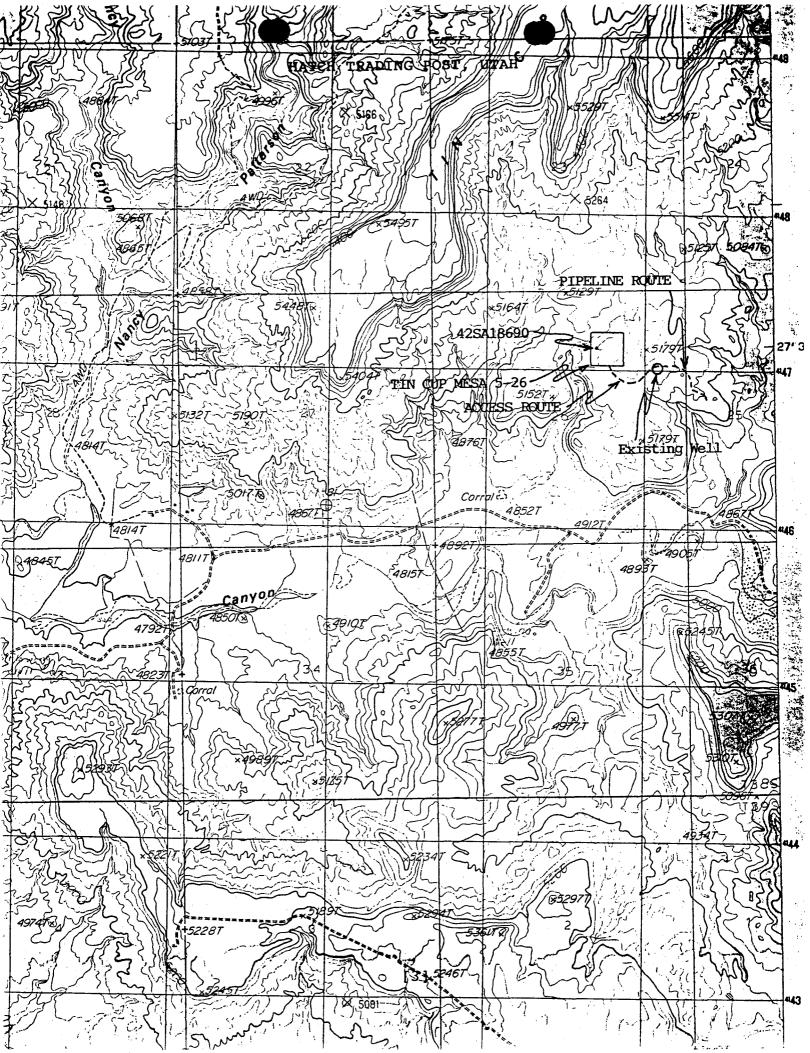
Sediments consist of aeolian sand and residual cobble to small boulder sized silicified sandstone over most of the area. Sandstone bedrock is exposed in a few places along the pipeline route.

The vegetation consists primarily of saltbush, snakeweed, cheat grass, and some greasewood. A sparse scatter of juniper are present along the west side of the well pad and the pipeline.

SURVEY PROCEDURES

Prior to the field investigations a file search was requested through the Division of State History, and another search conducted at the BLM office in Monticello. The files at the LAC office were also consulted. The searches indicated that no archeological sites had been recorded in the project area per se.

On-the-ground survey consisted of walking a series of transects spaced 15 meters apart across an area 660 X 660 feet (ten acres) surrounding the well center stake, and a single sinuous



transect along the access route and pipeline, effectively inventoring a 100' wide corridor. The one site found was documented on a standard IMACS site form.

SURVEY RESULTS

One archeological site was found during the survey. This site is located to the west of the well pad and below a sandstone cliff. A brief description of the newly recorded site is presented below. More detailed information is contained in the site form submitted to the BLM and Division of State History.

Site No.: 42SA

Description: This site consists of a dense concentration of burned rock and ash and lithic debitage in a 3 X 3m area. Much of the lithic material is secondary and primary flakes, and most are relatively large and blocky. It appears that the ash and burned rock may be the result of heat treating lithic materials, and that the site may have been a primary lithic reduction locale. The site is considered to be significant and potentially eligible for nomination to the National Register.

CONCLUSION

The archeological survey of Marathon Oil Company's Tin Cup Mesa 5-26 well pad, a ca. 1200' access road, and an additional ca. 1500' pipeline route was conducted by personnel of La Plata Archeological Consultants, Inc. on September 28, 1987. The project is located on lands administered by the Bureau of Land Management in San Juan County, Utah. An area 660 X 660' surrounding the well

center stake and a 100' wide corridor along the access and pipeline routes were surveyed. One archeological site was found. This site is located to the west of the well pad and should not receive any adverse effect from the project. Care should be taken, however, to insure that no back dirt from the pad construction is dumped onto the site. Provided that the site is strictly avoided archeological clearance for the project is recommended.

121006

OPERATOR Marathon	Oil Col	DATE 11-13-87
WELL NAME Sin Comp	Muse 5-26	
SEC SW NE 26 T 355	R 25E CO	UNTY San Juan
43-037-3136 API NUMBER	8	Fee . TYPE OF LEASE
CHECK OFF:		
PLAT	BOND	NEAREST WELL
LEASE	FIELD	POTASH OR OIL SHALE
PROCESSING COMMENTS:) approved 12/1	187
nead water per	•	
		eng epistem and hiji sa sa para ang ing anakana sa pagalang ang ang ang ang ang ang ang ang ang
		in the second of
APPROVAL LETTER:	•	
SPACING: R615-2-3	Vin Coup Mes	R615-3-2
	CAUSE NO. & DATE	R615-3-3
STIPULATIONS: 1- Water		
		/
		·



3 Triad Center • Suite 350 • Salt Lake City, UT 84180-1203

UNITED STATES POSTAL SERVICE OFFICIAL BUSINESS

SENDER INSTRUCTIONS Print your name, address, and ZIP Code in the space below.

• Complete items 1, 2, 3, and 4 on the reverse.

 Attach to front of article if space permits, otherwise affix to back of article.

• Endorse article "Return Receipt Requested" adjacent to number.





PENALTY FOR PRIVATE USE. \$300

RETURN TO

Print Sender's name, address, and ZIP Code in the space below.

STATE OF UTAH NATURAL RESOURCES OIL. GAS. & MINING 3 TRIAD CENTER, SUITE 350 SALT LAKE CITY. UTAH 84180-1203

SENDER: Complete items 1 and 2 when additional services are desired, and complete items 3 and 4.			
Put your address in the "RETURN TO" space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.			
1. M Show to whom delivered, date, and addressee's address	2. Restricted Delivery.		
3. Article Addressed to:	4. Article Number		
Bureau of Land Management P. U. Box 970	POO1 717 633		
	Type of Service:		
	Begistered Facured Cop Express Mail		
Moab UtAh 84325	Cxpress wan		
7,1000,000	Always obtain signature of accessive or agent and DATE DECREARS		
5. Signature — Addressee	8. Addressee's Address (N. W.)		
X	requested and see thid)		
6. Signature - Aganty ()	[16]]		
x 5 L by Grea Joh	Mon (1987)		
7. Date of Delivery	GEPO		
PS Form 3811, Feb. 1986	DOMESTIC RETURN RECEIPT		

P 001 717 633

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED NOT FOR INTERNATIONAL MAIL

(See Reverse)		
Sent to Bureau of LANd	Navageme	nt
Street and No. 970	, <i>y</i>	٠.
P.O., State and AIR Code 1/	84325	
Postage J	\$	Z.
Certified Fee		1401
Special Delivery Fee		# then
Restricted Delivery Fee		Ų,
Return Receipt Showing to whom and Date Delivered		22-
Return receipt showing to whom, Date, and Address of Delivery		
TOTAL Postage and Fees	\$	S. S.
Postmark or Date		ر ا
		- 1
	Sent to Bureau of Land of Street and No. 970 P.O. Bux 2 P.O. State and AIP code of Control of Contr	Sent to Bureau al And Manageme Street and No. 970 P.O., Bux 299 P.O., State and Alip Code Ut State and Alip Code U

D STATES POSTAL SERVICE OFFICIAL BUSINESS

SENDER INSTRUCTIONS at your name, address, and ZIP Code the space below.

Complete items 1, 2, 3, and 4 on the reverse.

Attach to front of article if space permits, otherwise affix to back of article.

 Endorse article "Return Receipt Requested" adjacent to number.



PENALTY FOR PRIVATE USE, \$300

RETURN TO



Print Sender's name, address, and ZIP Code in the space below.

STATE OF UTAH
NATURAL RESOURCES
OIL, GAS, & MINING
3 TRIAD CENTER, SUITE 350
SALT LAKE CITY, UTAH 84180-1203

SENDER: Complete items 1 and 2 when additional services are desired, and complete items 3 and		
Put your address in the "RETURN TO" space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.		
1. Show to whom delivered, date, and addressee's addre	ss. 2. Restricted Delivery.	
3. Article Addressed to:	4. Article Number	
Mobil Oil The	1001 717 634	
(orp.	Type of Service:	
Mobil Oil Forp. P.O. Box 5444, Denver, Colorado 80217	Begistered Insured Certified Coo	
Denver, Colorado 80217	Always obtain signature of addresses or agent and DATE DELIVERED.	
5. Signature — Addressee	8. Addressee's Address (ONLY if	
X	requested and fee paid)	
6. Signature – Agent X Thurs		
S Form 3811, Feb. 1986	DOMESTIC RETURN RECEI	

P 001 717 634

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED NOT FOR INTERNATIONAL MAIL

(See Reverse)

5014	Sent to Mobil Oil Co	ro.		
84-446	Street and No. Rox 5444			
U.S.G.P.O. 1984-446-014	P.O. State and ZIP Code, Denuer, Olorado 8021			
1.S.G.F	Postage	\$		
*	Certified Fee			
	Special Delivery Fee			
	Restricted Delivery Fee			
	Return Receipt Showing to whom and Date Delivered			
1982	Return receipt showing to whom, Date, and Address of Delivery			
PS Form 3800, Feb. 1982	TOTAL Postage and Fees	\$		
800	Postmark or Date			
E				
S To				
ı				

D STATES POSTAL SERVICE OFFICIAL BUSINESS

PM

SENDER INSTRUCTIONS it your name, address, and ZIP Code he space below. Complete items 1, 2, 3, and 4 on the reverse. Attach to front of article if space permits, otherwise affix to back of article.

• Endorse article "Return Receipt ""
Requested" adjacent to number.



PENALTY FOR PR USE, \$300

TO P

Print Sender's name, address, and ZIP Code in the space below.

STATE OF UTAH

NATURAL RESOURCES

OIL, GAS, & MINING

3 TRACE CITY LITTLE 350

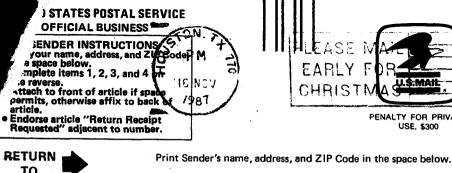
SALT LAKE CITY. UTAH 84180-1203

SENDER: Complete items 1 and 2 when additional services are desired, and complete items 3 and 4			
Put your address in the "RETURN TO" space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.			
1. Show to whom delivered, date, and addressee's addressee's	ss. 2. Restricted Delivery.		
3. Article Addressed to:	4. Article Number		
Calair To	P001 717 635		
CEISIUS Energy Compoun	Type of Service:		
P.O. Box 11070 SAHLAKE City, UtAL	Begistered Insured Cortified COD Express Mail		
3417 -41CE (179, OTAL) 84147	Always obtain signature of addressee or agent and <u>DATE DELIVERED</u> .		
5. Signature – Addressee X	8. Addressee's Address (ONLY if requested and fee paid)		
6. Signature – Agent			
7. Date of Delivery	<u> </u>		
11-16-87			
PS Form 3811, Feb. 1986 \\	DOMESTIC RETURN RECEIP		

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED NOT FOR INTERNATIONAL MAIL

	(See neverse)		
5-014	Sent to (1/5/US Enc	erus (a	
U.S.G.P.O. 1984-446-014	Streemand No.	<i>J</i>	
2	P.O., State and ZIP Gode		
2.5	Postage	\$.	
) (Certified Fee		
	Special Delivery Fee		
	Restricted Delivery Fee		
	Return Receipt Showing to whom and Date Delivered		
706	Return receipt showing to whom, Date, and Address of Delivery		
Len. 1307	TOTAL Postage and Fees	\$	
m sour,	Postmark or Date		
_	1		





TO

STATE OF UTAH NATURAL RESOURCES OIL. GAS. & MINING 3 TRIAD CENTER SUITE 350 SALT LAKE CITY, UTAH 84180-1203

Hartanian Harithanna Hartallan (1911)

SENDER: Complete items 1 and 2 when additional serve	
Put your address in the "RETURN TO" space on the reverse and from being returned to you. The return receipt fee will delivered to and the date of delivery. For additional fees the postmaster for fees and check box(es) for additional service	provide you the name of the person e following services are available. Consult (s) requested.
Show to whom delivered, date, and addressee's addressee's	
3. Article Addressed to:	4. Article Number
MCOR VILTERS GOP	POOK 717 6 36 Type of Service:
MCOR Vilt GAS Gop 5718 Westheimer	Registered Intersed COD
Haus for Texas 77057 5. Signature - Addressee	Always obtain signature of addressee or agent and DATE DELIVERED.
5. Signature — Addressee	8. Addressee's Address (ONLY if
X	requested and fee paid)
6. Signature — Agent	
× Maulate /	Drawie .
7. Date of Delivery	
Form 3811, Feb. 1986	DOMESTIC RETURN RECE

P 001 717 636

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED NOT FOR INTERNATIONAL MAIL

(See Reverse)

Sent to MOR Oil+1	AS CORP	
P.O., State and ZIP Code		
Certified Fee		,,,,
Special Delivery Fee		
Restricted Delivery Fee		١
Return Receipt Showing to whom and Date Delivered		
Return receipt showing to whom, Date, and Address of Delivery		١,
TOTAL Postage and Fees	\$	
Postmark or Date	·	
	Street and No. P.O., State and ZIP Code Postage Certified Fee Special Delivery Fee Restricted Delivery Fee Return Receipt Showing to whom and Date Delivered Return receipt showing to whom, Date, and Address of Delivery TOTAL Postage and Fees	Street and No. P.O., State and ZIP Code Postage Certified Fee Special Delivery Fee Restricted Delivery Fee Return Receipt Showing to whom and Date Delivery Return receipt showing to whom, Date, and Address of Delivery TOTAL Postage and Fees \$ Corp. Corp. Corp. Corp. Street and No. Street and No. Street and Postage Special Delivery Fee Return receipt showing to whom, Date, and Address of Delivery TOTAL Postage and Fees \$ Corp. Street and No. Street and No. Street and Postage and Fees Special Delivery TOTAL Postage and Fees

AFFIDAVIT OF PUBLICATION

Public notice

BEFORE THE DIVISON OF OIL, GAS AND MINING DEPARTMENT OF NATURAL RESOURCES STATE OF UTAH

IN THE MATTER OF THE APPLICATION OF MARATHON OIL COMPANY FOR ADMINISTRATIVE APPROVAL OF THE TIN CUP MESA # 5-26 WELL LOCATED IN SECTION 26, TOWNSHIP 38 SOUTH, RANGE 25 EAST, S.L.M., SAN JUAN COUNTY, UTAH, AS A CLASS II INJECTION WELL.

CAUSE NO. UIC-103

THE STATE OF UTAH TO ALL PERSONS INTERESTED IN THE ABOVE ENTITLED MATTER.

Notice is hereby given that Marathon Oil Company, has requested administrative approval of the Tin Cup Mesa # 5-26 well, Section 26, Township 38 South, Range 25 East, S.L.M., San Juan County, Utah, as a Class II injection well.

The proposed operating data for the well is as follows:

INJECTION INTERVAL: Paradox Formation 5530' to 5555'

MAXIMUM SURFACE PRESSURE: 3600 psig

MAXIMUM INJECTION RATE:

4000 bwpd Administrative approval of this

application will be granted, unless objections are filed within fifteen days after publication of this Notice. Objections should be mailed to the Division of Oil, Gas and Mining, Attention: UIC Program Manager, 3 Triad Center, Suite 350, 355 West North Temple, Salt Lake City. Utah 84180-1203.

DATED this 12th day of November, 1987.

STATE OF UTAH

November 18, 1987.

DIVISION OF OIL, GAS AND MINING MARJORIE L. ANDERSON Administrative Assistant Published in The San Juan Record Juan Record, a weekly newspaper of general circulation published at Monticello,

Utah every Wednesday; that notice of application of Marathon

Oil Company: Cause No. UTC-103

a copy of which is hereunto attatched, was published in the regular and entire issue of each number of said newspaper for a period of one issues, the first publication having been made on November 10, 1087.

Publisher

Subscribed and sworn to before me this 18th day of November

A.D. 1987

Ingua X adams

Notary Public residing at Monticello, Utah

My commission expires ______December 2, 1987

143 SOUTH MAIN ST. P.O. BOX 45838 SALT LAKE CITY, UTAH 84145

FED. TAX I.D. # 87-0217663

Newspaper Amncy Corporation

The Salt Lake Tribune

DESERET NEWS

MORNING & SUNDAY

EVENING & SUNDAY

Affidavit of Publication

STATE OF UTAH. County of Salt Lake for DIV.OF CIL. GAS & MIN

Hereby certify that the attached advertisement of CAUSE NO. UIC-103BEFORE THE DIVISION OF DI

was published by the

NEWSPAPER AGENCY CORPORATION, AGENT FOR THE SALT LAKE TRIBUNE and DESERET NEWS, daily newspapers printed in the English language with general circulation in Utah, and published in Salt Lake City, Salt Lake County in the State of Utah.

NOV 18 1987 PUBLISHED ON ____

SUBSCRIBED AND SWORN TO BEFORE ME THIS 19TH DAY OF NOVEMBER 19 87

CAUSE NO. URC-103
BEFORE THE DIVISION OF OIL,
GAS AND MINING
DEPARTMENT OF NATURAL
RESOURCES, STATE OF UTAH
IN THE MATTER OF THE APPLICATION OF MARATHON
OIL COMPANY FOR ADMINISTRATIVE APPROVAL OF THE
TIN CUP MESA *5-26 WELL
LOCATED IN SECTION 26,
TOWNISHIP 38 SOUTH, RANGE
25 EAST, S.L.M., SAN JUAN
INJECTION WELL
THE STATE OF UTAH TO THE STATE OF UTAH TO ALL PERSONS INTERESTED! IN THE ABOYE ENTITLED MATTER.

Notice is hereby given that Notice is hereby given that Marathon Oil Company, has requested administrative approval of the Tin Cup Mesa #5-26 well, Section 26, Township 38; South, Range 25 East, S.L.M., San Juan County, Utah, as a Class II injection well.

The proposed appraising data for the well is as follows:
INJECTION_INTERVAL: Paradox Formation 5530; D 5555

dox Formation 5530' to 5555'
MAXIMUM SURFACE PRESSURE: 3600 psigMAXIMUM INJECTION RATE:

4000 bwpd', Administrative approval of this application will be granted, unless objections are filed within fifteen days after publication of this Notice. Objections should

TARY PUR DEC 0 1 1987 8. T. DAVIS DIVIDIUM UF OIL, GAS & MINING

NOTABY PUBLIC

1988 MARCH 1,

COMMISSION EXPIRES

RESIDING IN SALT LAKE COUNTY

of this Notice. Objections should be mailed to the Division of Oil, Gas and Mining, Attention: UIC	LEGAL	ADVERTISING INVOL	CE	,	
Program Manager, 3 Triad Center, Suite 350, 355 West	ACCOUNT NAME		AD	NUMBER	TELEPHONE
North Temple, Salt Lake City, Utah 84180-1203. DATED THIS 12th day of No- vember, 1987.	F CIL. GAS & MI	N		5-43	801-538-5340
BOARD OF OIL, GAS		SCHEDULE			MISC. CHARGES
/s/ Mariorie L. Anderson Administrative Assistant S-43	11011				•00
CAF	TION	SIZE	TIMES	RATE	AD CHARGE
CAUSE NO. UIC	-1035EFORE THE	54 LINES	1	1.22	65.88
DUE AND PAYAR	BLE ON RECEIPT OF T	HIS INVOICE			

FOR BILLING INFORMATION CALL 801-237-2796

TOTAL AMOUNT DUE 65.88

TO INSURE PROPER CREDIT

PLEASE RETURN THIS PORTION

WITH YOUR PAYMENT IN THE ENCLOSED ENVELOPE MAKE CHECKS PAYBLE TO:

NEWSPAPER AGENCY CORPORATION

PLEASE WRITE YOUR ACCOUNT NUMBER ON YOUR CHECK

BILL TO:

DIV.OF DIL. GAS & MIN 355 W.NO. TEMPLE 3 TRIAD CENTER. # SLC. UT

64180

ACCOUNT NUMBER	BILLING DATE
LE-5385340	11/19/87
AD NUMBER	PAY THIS AMOUNT
5-43	65.88



Norman H. Bangerter, Governor Dee C. Hansen, Executive Director Dianne R. Nielson, Ph.D., Division Director

355 W. North Temple • 3 Triad Center • Suite 350 • Salt Lake City, UT 84180-1203 • 801-538-5340

December 4, 1987

Marathon Oil Company Post Office Box 2690 Cody, Wyoming 82414

Gentlemen:

Re: Tin Cup Mesa #5-26 Well, Section 26, Township 38 South, Range 25 East, S.L.M., San Juan County, Utah

In accordance with Rule R615-5-3(3), Oil and Gas Conservation General Rules, administrative approval for the referenced Class II injection well is granted.

The following actions are necessary to fully comply with this approval:

- Compliance with the UIC requirements for operation, maintenance and reporting for Class II injection wells.
- 2) Conformance with all conditions of the submitted application.

If you have any questions regarding this approval or the necessary requirements, please contact this office.

Best regards.

Dianne R. Nielsor

Director

mfp 7627U



355 W. North Temple • 3 Triad Center • Suite 350 • Salt Lake City, UT 84180-1203 • 801-538-5340

December 7, 1987

Marathon Oil Company P. O. Box 2690 Cody, Wyoming 82414

Gentlemen:

Re: <u>Tin Cup Mesa 5-26 - SW NE Sec. 26, T. 38S, R. 25E</u> 1375' FNL, 1635' FEL - San Juan County, Utah

Approval to drill the referenced well is hereby granted in accordance with Section 40-6-18, Utah Code Annotated, as amended 1983; and predicated on Rule R615-2-3, Oil and Gas Conservation General Rules, subject to the following stipulations:

1. Prior to commencement of drilling, receipt by the Division of evidence providing assurance of an adequate and approved supply of water as required by Chapter 3, Title 73, Utah Code Annotated.

In addition, the following actions are necessary to fully comply with this approval:

- 1. Spudding notification to the Division within 24 hours after drilling operations commence.
- 2. Submittal of an Entity Action Form to the Division within five working days of the time that the well is spudded or a change in operations or interests necessitates a change in entity status.
- 3. Submittal to the Division of completed Form OGC-8-X, Report of Water Encountered During Drilling.
- 4. Prompt notification to the Division should you determine that it is necessary to plug and abandon this well. Notify John R. Baza, Petroleum Engineer, (Office) (801) 538-5340, (Home) 298-7695, or R. J. Firth, Associate Director, (Home) 571-6068.
- 5. Compliance with the requirements of Rule R615-3-22, Gas Flaring or Venting, Oil and Gas Conservation General Rules.

Page 2 Marathon Oil Company Tin Cup Mesa 5-26 December 7, 1987

- 6. Prior to commencement of the proposed drilling operations, plans for toilet facilities and the disposal of sanitary waste at the drill site shall be submitted to the local health department having jurisdiction. Any such drilling operations and any subsequent well operations must be conducted in accordance with applicable state and local health department regulations. A list of all local health departments and copies of applicable regulations are available from the Division of Environmental Health, Bureau of General Sanitation, telephone (801) 538-6121.
- 7. This approval shall expire one (1) year after date of issuance unless substantial and continuous operation is underway or an application for an extension is made prior to the approval expiration date.

The API number assigned to this well is 43-037-31368.

Sincerely,

Jønn R. Baza

Fetroleum Engineer

as

Enclosures

cc: Branch of Fluid Minerals

D. R. Nielson

8159T

F orm 3160-3 (November 1983) (formerly 9-331C)

SUBMIT IN TRIE (Other instructions on reverse side)

Form approved. Budget Bureau No. 1004-0136 Expires August 31, 1985

שבט –	UNITED	STATE	ES	
DEPART	MENT OF	THE	INTERIO	R
	AISHOENICAN			

•	LEASE DESIGNATION	AND SERIAL NO.
	U-31928	Orl-AKAH
١.	IF INDIAN, ALLOTS	1705 XE

	CAL BOIRE & UNDA	T		<u>U-31928 ∂</u>		
APPLICATION		O DRILL, DEEPE		ACK	6. IF INDIAN, ALLOWS E	705
TYPE OF WORK			PLUG BAC		7. UNIT AGREEMENT NAI	ME
	LL 🖾	DEEPEN	PLUG BAC	~ _	Tin Cup Me	sa
OIL GA	us T	ter Injection so	NGLE MULTIP	ue 🗌	8. FARM OR LEASE NAME	B
WELL W NAME OF OPERATOR	ELL OTHER WC	1001 1110001011 20			Tin Cup Me	sa
Marathon Oil	Company				9. WELL NO.	
ADDRESS OF OPERATOR					5-26	
P. O. Box 269	0, Cody, Wyomir	ng 82414			10. FIELD AND POOL, OR	
At surince		in accordance with any S	tate requirements.")		Tin Cup Me	
1375 FNL & 1	[635' FEL				11. SEC., T., E., M., OR BI AND SURVEY OR ARE	SA.
At proposed prod. zon			43-037-3130	28	Sec. 26, T	
					-··· 1	Utah
Approximately	/ 8.5 miles Nor	theast of Hatch	Irading Post	1 17 80 0	·	ULan
			O. OF ACRES IN LEASE			
(Also to nearest drl	g. unit line, if any) 90	5'Lease Line 7	60	N/A	RY OR CARLE TOOLS	
DISTANCE PROM PROF TO NEAREST WELL, D	POSED LOCATION PRILLING, COMPLETED,	19. 178				
	ather DE RT CR etc.)	orox. 988' 581	1'	<u>i Kota</u>		K WILL START*
					ASAP	
s. SIUI' Ungrade		PROPOSED CASING ANI	CEMENTING PROGR.	AM	, non	
				1	QUANTITY OF CEMEN	<u> </u>
	l	. <u> </u>		865 s		
A 12-1/4" h will be run and 5-1/2" to approxim and the wel	nole will be dr and cemented t 15.5# and 17#, ately 2150'. T I will be compl	illed to 2250' o surface. A 7- K-55 casing wi he Ismay format eted as a water	and 2250' of 1 -7/8" hole will 11 be run from ion well be per injection well	then be TD to forated	o/8", 36#, K-55 be drilled to 58 be surface and o	casing B11', TD cemented
N ABOVE SPACE DESCRIB	Title & PROPOSED PROGRAM: If drill or deepen direction	Contract (Hous	ton) plug back, give data on 1	oresent proc	ductive zone and propose	d new productive nsGive blowou
	<u></u>					
RIGNED ROW	Jealan	TITLE _R	egulatory Coord	inator	DATE Novem	<u>ber 6, 19</u>
(This space for Fed	eral or State office use)					
PERMIT NO.			APPROVAL DATE			
	s/ Kenneth V. Rhea	a .	METRICT IS	Service	DEC	0 4 1987
APPROVED BY		TITLE 6	(A. 1872A)		DATE	VENTING (
14. DIRTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR FOST OFFICE* Approximately 8.5 miles Northeast of Hatch Trading Post 15. DIRTANCE POW PROPAGED* 15. DIRTANCE POW PROPAGED* 15. DIRTANCE DIR WEBDARD* 15. DIRTANCE POW PROPAGED* 16. DIRTANCE POW PROPAGED* 16. DIRTANCE POW PROPAGED* 17. NO. OF ACRES ASSISSAND 17. THIS WELL. 17. NO. OF ACRES ASSISSAND 18. PROPAGED DEFTH 20. ROZARI OR CABLE POOLS 20. ROZARI OR CABLE POOLS 21. PROPOSED CASING AND CEMENTING PROGRAM SIZE OF RASING WEIGHT PER FOOT SETTING DEFTH 22. APPROX. DATE WORK WEIGHT PER FOOT SETTING DEFTH 23. APPROX. DATE WORK WEIGHT PER FOOT SETTING DEFTH 24. DIRTANCE POW PROPAGED PROPAGED* 25. DIRTANCE POW PROPAGED PROPAGED* 26. SACKS TO SUFFACE 27. PROPAGED PROPAGED PROPAGED PROPAGED* 28. DIRTANCE PROPAGED P			, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			

CONDITIONS OF APPROVAL ATTACHED

FLARING OR VENTING OF GAS IS SUBJECT OF NTL 4-A DATED 1/1/80

1375 PROPOSED LOCATION 1635 Section 26 Scule: 1"= 1000'

WELL LOCATION: MARATHON OIL CO. - TIN CUP MESA No. 5-26

Located 1375 feet South of the North line and 1635 feet West of the East line of Section 26 Township 38 1 South Range 25 East Salt Lake Meridian

Existing ground elevation determined at 5101 feet based on Well Na 3-26,

a hereby certify theirobove plot represents a survey thade under my supervision and ther it is accurate

FREDERICK H. REED

Exhibit 'B'

MARATHON OIL CO. Cody, Wyoming

WELL LOCATION PLAT Tin Cup Mes No. 5-26 Sec. 26, T38³, R25 E San Juan County, Utah

CLARK - RELU & 4550C | 647 E - Sept. 30, 1987 FILE NO 87019

Marathon Oil Company Well No. Tin Cup Mesa 5-26 Sec. 26, T. 38 S., R. 25 E. San Juan County, Utah Lease U-31928

CONDITIONS OF APPROVAL

Approval of this application does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

NOTIFICATIONS

Notify the San Juan Resource Area, at (801) 587-2141 for the following:

- 2 days prior to commencement of dirt work, construction or reclamation;
- 1 day prior to spudding;
- 1 day prior to running and cementing surface casing;
- I day prior to pressure testing of BOPE and/or surface casing.

Notify the Moab District Office, Branch of Fluid Minerals at (801) 259-6111 for the following:

No well abandonment operations will be commenced without the prior approval of the District Manager. In the case of newly drilled dry holes, and in emergency situations, verbal approval can be obtained by calling the following individuals, in the order listed:

Da:	le Manc	hester,	Petroleum	Engineer	Office Phone:	(801)	259-6111
-----	---------	---------	-----------	----------	---------------	-------	----------

Home Phone: (801) 259-6038

Lynn Jackson, Chief, Branch of Fluid Minerals

Office Phone: (801) 259-6111

Home Phone: (801) 259-7990

Paul Brown, I&E Coordinator Office Phone: (801) 259-6111

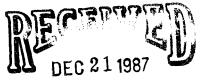
Home Phone: (801) 259-7018

24 hours advance notice is required for all abandonments.





P.O. Box 2690 Cody, Wyoming 82414 Telephone 307/587-4961



December 16, 1987

DIVISION OF OIL, GAS & MINING

State of Utah Division of Oil, Gas and Mining 355 West North Temple 3 Triad Center, Suite 350 Salt Lake City, Utah 84180-1203

Gentlemen:

As stipulated in your approval letter granting Marathon Oil Company permission to drill its proposed Tin Cup Mesa #5-26 well, please find attached the Temporary Permit for Water Use issued by the State of Utah, Natural Resources, Water Rights.

If any further information is needed feel free to contact this office.

Sincerely,

MARATHON OIL COMPANY

R. P. Meabon Regulatory Coordinator Rocky Mountain Region

RPM/FMK/rrm

Attachment

						*				
Form 3 (Novem	her 10021		UN ED S	TATES		IT IN TRIP	TE.	Form appro Budget Bur Expires Au	eau No. 1	1004-0135 1985
	rly 9-331)		MENT OF		(IUK verse s	ide)	1	-31928	TION AND	BRIAL NO.
								F INDIAN, ALL	TTER OR	TRIBE NAME
	SUND (Do not use this fo		TICES AND							
1.					· · · · · · · · · · · · · · · · · · ·		7. 0	INIT AGREEMEN	T NAME	
WIL	L GAM	OTELL	Injector				ļ ī	in Cup M	esa	
2. NAM	E OF OPERATOR						1	FARM OR LEASE		
	rathon Oil (Company		···				in Cup M	esa	·
	0. Box 269	0 (24)	Ulvomána	00/1/				7111 NO. 5-26		
4. LOCA	ATION OF WELL (Rep	ort location	clearly and in ac	OZ414 cordance with an	State require	ments.	1	FIELD AND POO	L. OF WIT	.DCAT
	also space 17 below. surface	.)						in Cup M		
137	75' FNL & 16	35' FEL						BURYET OR	OR BLK. A	uro cru
	•		-					Sec. 26,	ZAST	D25F
14. PZE:			15. ELEVATION	S (Show whether I	F, RT, GR, etc.)		12.	COUNTY OF PA	RISH 13.	STATE
43-	-037-31368			5101' Ung	graded GL		S	an Juan		Utah
16.		Check A	ppropriate Bo	c To Indicate I	Nature of N	otice, Report,	or Other	Data		
	יסת	TICE OF INTE		•				ENFORT OF:		
TES	ST WATER SHUT-OFF		PULL OR ALTER O	ASING	WATE	R SHUT-OFF		REPAIR!	NO WELL	
FRA	ACTURE TREAT		MULTIPLE COMPI	ETE	PRACT	URE TREATMENT		ALTERI	AC CTRING	
EH3	OOT OR ACIDIZE		ABANDON®		i	TING OR ACIDIZING		TETADO	MMENT*	
	PAIR WELL		CHANGE PLANS			r) <u>See Beloi</u> (Note: Report re		nitinia semale:	Man an VI	K
	ther)	OVER FTED OF	FEATIONS (Classic			Completion or Rec	completion	Report and La	e form 1	-
	TRIDE PROPOSED OR CO roposed work. If we ent to this work.) *	ell is direct	ionally drilled, gi	ve subsurface loc	nt details, and ations and mea	i give perlinent d sured and true v	ates, incluertical dep	ding estimated tha for all ma	date of a	starting any zones perti-
					٠					
				٠				•		
					•					
0n	March 3, 1	988 not	ification w	as made to	the Mar	athon Offic	ce that	water t	rucks	could n
10	onger gain a	ccess to	o the permi	tted water	source	located in	Section	n 35. T3	RS R2	SF dua
to) a beaver di	am flood	ding the ar	ea. The S	State of	Utah. Divis	sion of	Natural	Resou	rces .
Wa	iter kignts.	was not	titied of t	ne problem	${\sf n}$ and ${\sf Mr}$.	John Solen	n arant	ed verhal	lannr	nt Isvo
- Cn	nange the po	int of (liversion t	o cross cr	reek (SW4	Section 2	5, T38S	, R25E).	Mr.	Bob
to	urri, BLM Mon make the cl	nciceile hange) was noth	ied of the	problem	and verba	i appro	val was	also g	ranted
	make the ci	nunge.								
	•	٠.								
	•				·					
					,			•		
							•			•
BL	M-Orig & 3-	-cc: UI	DOGM-2. WRF	. FMK. WTR	. Title	& Contract	(Houst	on)		
	(3 0,000		s true and correc					<u> </u>		····
SIGN	ED R 6 W8	2/9/		TITLE Reg	ulatory	Coordinator		DATE Mare	ch 3,	1988
(This	s space for Federai	or State off	ce use)							

*See Instructions on Reverse Side

10. If water is to be stored, give capacity of reservoir in acre-feet ____ ____height of dam ___ area inundated in acres _____legal subdivision of area inundated ______ 11. If application is for irrigation purposes, the legal subdivisions of the area irrigated are as follows: 12. Is the land owned by the applicant? Yes No X If "No," explain on page 2. 13. Is this water to be used supplementally with other water rights? Yes_____No...X. If "yes," identify other water rights on page 2. 14. If application is for power purposes, describe type of plant, size and rated capacity. 15. If application is for mining, the water will be used in _____ Mining District at the_____ mine, where the following-ores are mined _____ 16. If application is for stockwatering purposes, number and kind of stock watered 17. If application is for domestic purposes, number of persons ______, or families ______ 18. If application is for municipal purposes, name of municipality..... 19. If application is for other uses, include general description of proposed uses Oil Mell Drilling..... 20. Give place of use by legal subdivision of the United States Land Survey for all uses described in paragraphs 14 to 19, incl. SE1 NE1 Sec. 26, T38S, R25E proposed wellsite for Iin Cup Mesa. #5-26. (See attached map for source and haul route). The use of water as set forth in this application will consume ______3.5____ second-feet and/or acrefeet of water and _____ second feet and/ or acre feet will be returned to the natural stream or source at a point described as follows:

Listina & Albica

MICROFILMED

(SEAL)

Notary Public

STATE ENGINEER'S ENDORSEMENT

WATER RIGHT NUMBER: 09 - 1540

APPLICATION NO. 162937

1. October 23, 1987

Application received.

and the second of the second s

2. October 29, 1987

Application designated for APPROVAL by MP and KLJ.

3. Comments:

Conditions:

This application is hereby APPROVED. dated November 3, 1987, subject to prior rights and this application will expire on November 3, 1988.

Robert L. Morgan State Engineer

DIVISION OF OIL, GAS AND MINING

NAME OF COMPANY: MARATHON OIL COMPANY

030744

SPUDDING INFORMATION

API #43-037-31368

WELL NAME:	TIN CUP MESA #5-26					
SECTION SW SE 26 TOWNSHIP_	38S	RANGE_	25E	COUNTY	San Juan	
DRILLING CONTRACTOR	Coleman					
RIG #4						
SPUDDED: DATE 3-3-88						
TIME3:00 AM						
HowRotary_						
DRILLING WILL COMMENCE 3-	3-88		%.			
REPORTED BY Frank Krugh	<u> </u>					
TELEPHONE # 307-587-496	1					
DATE		·	SIGNED_	SBH		

					_	
Form 3160-5	UN ED STA	TEC	STIPLIFE IN TRY		Form approved. Budget Bureau	No. 1004-0135
(November 1983)	UN TED STA PARTMEN OF TH		SUBMIT IN TRIP	TE*	Expires August	31, 1985
, ,			NL/ Actac moc)		U-31928 AL	AND REPLAC NO.
	BUREAU OF LAND MA				IF INDIAN, ALLOTTE	<u>(l </u>
	NOTICES AND R		N WELLS	"		
(Do not use this form f	or proposals to drill or to d APPLICATION FOR PERMI	leepen or plug be	TO CHALLES AND	HE OF	030	0915
1.		Unite		7	UNIT AGREEMENT NA	
OIL CAB	other Injector	111		al III i "	Tin Cup Mesa	
2. NAME OF OPERATOR	STHER THUCKEUM		1100 N 1000		FARM OR LEASE NA	
			MAR 07 1988		Tin Cup Mesa	
Marathon Oil Com	pany		D0 01011 05		WALL NO.	l
P. O. Box 2690,	Cody Wyomina Q'	2/1/1 /	DIVISION OF	"	5-26	
4. LOCATION OF WELL (Report le	ocation clearly and in accor	dance with any S	ML, GAS & MINING). PIELD AND POOL, O	* WILDCAT
See also space 17 below.) At surface	•	•	• • • • • • • • • • • • • • • • • • • •	-	Tin Cup Mesa	
1375' FNL & 1635'	FFI			11	L sac, T, a, M, or a	
	,				BURYET OR AREA	
	•				Sec. 26, T38	C D2EE .
14. PERMIT NO.	15. ELEVATIONS (Show whether Dr. R	T. CR. FLC.)	12	2. COUNTY OR PARISE	
43-037-31368		5101' Ungra	ded GI		San Juan	Utah
			·			1 Otali
16. Ch	eck Appropriate Box T	o Indicate Na	ture of Notice, Repo	ort, or Othe	≥r Data	
NOTICE	OF INTENTION TO:	1		AUBERQUENT	REPORT OF:	
TIST WATER SHUT-OFF	PULL OR ALTER CASE	, , , , , , , , , , , , , , , , , , ,	WATER BHUT-OFF			
FRACTURE TREAT	MULTIPLE COMPLETE) 	PRACTURE TREATME		REPAIRING V	
SHOOT OR ACIDIZE	ABANDON*		SHOOTING OR ACIDIZ	· ·	ALTERING CA	
REPAIR WELL	CHANGE PLANS		(Other) Spud		ABANDONME	Y Y
(Other)			(Norg: Repor	rt results of	multiple completion	on Well
17. DESCRIBE PROPOSED OR COMPL	ETED OPERATIONS (Clearly St	ate all pertinent	dotally and also benefit		n Report and Log for	
proposed work. If well is nent to this work.)	directionally drilled, give	subsurface locatio	ns and measured and tri	ue vertical de	pths for all markers	e of starting any
·						
•					-	
·						
•				•		
				•		
	•		. •			•
•						
<i>'</i> -	· ·					
On(March 3, 1988	at 3:00 a.m. the	e above ret	erenced well w	as spudo	led by Colema	n Ria #4:
This was reporte	d to Mr. Dale Mai	nchester, E	RLM Moab, and M	is. Sandv	/ Heart of th	e State of
Utah, Division o	of Oil, Gas and M	ining on Ma	arch 3, 1988 by	rrank k	(rugh.	
	•		, ,	•		
	, e	•				
			•			
	•					
•					•	
•	•					
		•				-
BLM-Orig & 3cc	:_ UDOGM-2. WRF.	FMK. WTR.	Title & Contra	ct (Hous	ton)	
ld. I nereby certify that the for-	Reith 13 tire way correct	3				
SIGNED KRWS	eda	TITLE Regul	atory Coordina	tor	DATE March	3. 1988
(This age of a Direction						
(This space for Federal or S	Late omce use)					

*See Instructions on Reverse Side

BEST COPY available

COMEANY : MARATHON DIL COMPANY DATE : 23-MAR-8

SERIAL NO: EWO241 LATITUDE : 57.4

WELL NAME: TIN CUP MESA 5-28 LOCATION : SAN JUAN COUNTY, UTAH DISTRICT : CASPER SURVEYOR : D COY

CO REP : RAY ROSENTHAL

DEPTH REF: KB

REF ELEV : GROUND

CASING ID: 4 1/2 INCH DP

RUN GEAR : E.2.55

COMMENT 1: COMMENT 2: COMMENT 3:

RECORD OF SURVEY

RADIUS OF CURVATURE METHOD

BEST COPY available

COMPANY : MARATHON GIL COMPANY DATE : D3-MAR-8 SERIAL NO: EW8241

COMPUTATION FASE NO. 1 TIME DATE 19:44:13 23-MAR-88

MEASURED DEFTH FEET	DRIFT ANGLE D M	DRIFT DIRECTION DEG	TRUE VERTICAL DEPTH FEET	RECTANGU COORDINA FEET	LAR TES	DOGLEG SEVERITY DG/100FT
0 50 100 150 200	0 0 0 19 0 10 0 18 0 21	0 N 7 E N 37 E N 20 E N 23 E	.00 50.00 100.00 150.00 200.00	.00 .14 N .34 N .52 N .79 N	.00 .02 E .10 E .20 E .30 E	.00 .54 .38 .30 .09
250 300 350 400 450	0 20 0 21 0 23 0 22 0 19	N 6 W N 28 W N 32 W N 48 W N 64 W	250.00 300.00 350.00 399.99 449.99	1.08 N 1.38 N 1.65 N 1.91 N 2.08 N	.35 E .25 E .09 E .12 W .36 W	.35 .26 .10 .22 .22
500 550 600 650 700	Ø 11 Ø 7 Ø 6 Ø 6	S 73 W S 2 E S 78 E N 69 E N 32 E	499.99 549.99 599.99 645.99	2.10 N 1.99 N 1.92 N 1.93 N 1.94 N	.60 W .68 W .62 W .53 W	.45 .41 .28 .12 .20
750 800 850 900 950	0 3 0 7 0 13 0 22 0 25	S 77 W S 55 W S 23 W S 19 W S 3 E	749.99 799.99 849.99 899.99 949.99	1.94 N 1.91 N 1.79 N 1.55 N 1.21 N	.51 W .58 W .68 W .77 W .82 W	.10 .16 .26 .29
1000 1050 1100 1150 1200	0 22 0 17 0 20 0 29 0 34	S 35 E S 24 E S 9 W S 7 W S 1 E	999.99 1049.99 1099.99 1149.99 1199.58	.88 N .62 N .35 N .01 S .48 S	.70 W .55 W .52 W .57 W .59 W	.45 .22 .36 .32
1250 1300 1350 1400 1450	0 23 0 22 0 31 0 27 0 26	S 1 W S 23 W S 31 W S 23 W S 16 W	1249.98 1299.98 1349.98 1398.98 1449.98	.90 S 1.22 S 1.57 S 1.55 S 2.31 S	.59 W .65 W .84 W 1.03 W	.39 .29 .31 .19

COMPANY : MARATHON DIL COMPANY DATE : 23-MAR-8 SERIAL NO: EW0241

COMPUTATION PAGE NO. 2 TIME DATE 19:44:13 23-MAR-88

			TRUE			
	DRIFT	DRIFT	VERTICAL	RECTANG	ULAR	DOGLEG
MEASURED	ANGLE	DIRECTION	DEPTH	COORDIN		SEVERITY
DEFTH	D M	DEG	FEET	FEET		DG/100FT
FEET	חט	DEO	,,			
1500	0 27	S 41 W	1499.97	2.66 S	1.35 W	.39
1500 1550	0 36	S 36 W	1549.57	3.02 S	1.54 W	.32
1500	0 36	S 1 E	1599.97	3.51 S	1.79 ₩	.77
1650	Ø 18	5 9 W	1649.97	3.91 5	1.82 W	.60
1700	0 28	5 8 W	1699.97	4.24 \$	1.87 W	.31
1700	0 20			,		
1750	0 25	S 4 E	1749.96	4.53 S	1.89 W	.21
1800	0 11	S 56 W	1799.96	4.86 \$	2.00 W	.74
1850	0 20	5 40 W	1849.96	5.02 S	2.18 W	.32
1900	0 18	S B W	1899.96	5.28 \$	2.28 W	.39
1950	0 22	S 38 W	1949.95	5.55 S	2.39 W	.40
					5 51 11	.23
2000	0 29	S 33 W	1999.96	5.85 \$	2.61 W	.23
2050	0 20	S 36 W	2049.96	6.15 S	2.81 W	.55
2100	0 29	S 59 W	2099.96	6.37 S	3.10 W	.55 .51
2150	0 20	N 81 W	2149.96	6.41 S	3.46 W	.63
2200	0 39	N 88 W	2199.95	6.37 S	3.90 W	.63
2250	0 37	S 89 W	2249.95	6.36 \$	4.46 W	.11
	0 29	N 52 W	2299.95	6.21 5	4.91 W	.78
2300	0 49	N 52 W S 81 W	2349.95	5.07 5	5.45 W	1.22
2350	0 30	N 85 W	2399.94	6.09 5	5.04 W	.71
2400		N 60 W	2449.94	5.94 S	6.51 W	.56
2450	0 38	N BU W	2443.54	3.54 0	J. J.	
2500	0 41	N 35 W	2499.94	5.54 \$	6.94 W	.59
2550	0 27	N 45 W	2549.93	5.15 \$	7.25 W	.50
2600	0 32	N 35 W	2599.93	4.82 S	7.54 W	.25
2650	Ø 39	N 35 W	2649.53	4.38 S	7.85 W	.23
2700	0 31	N 19 W	2699.93	3.92 S	8.08 W	.44
					-	
2750	0 30	N 25 W	2745.52	3.51 S	8.25 W	.12
2800	0 41	N 18 W	2799.92	3.02 S	8.44 W	.38
2850	0 38	N 16 W	2849.92	2.47 S	8.61 W	.10
2900	Ø 28	N 8 E	2899.92	1.99 S	8.54 W	.56
2550	0 43	N 12 E	2949.91	1.47 5	8.55 W	.51

COMPANY : MARATHON GIL COMPANY

DATE : 23-MAR-8 TIME DATE SERIAL NO: EW2241 19:44:13 23-MAR-88

COMPUTATION PAGE NO. 3

TRUE VERTICAL RECTANGULAR DOGLE6 DRIFT DRIFT MEASURED DEPTH COORDINATES SEVERITY ANGLE DIRECTION DEPTH D6/100FT FEET FEET DEG FEET D M .98 5 8.39 W .52 N 24 E 2999.91 0 30 3000 8.21 W .13 .53 S 3049.91 0 33 N 22 E 3050 .12 S .23 8.04 W 3099.51 N 22 E 0 25 3100 .32 N .43 7.92 W 3149.90 0 36 N 7 E 3150 7.82 W .20 .87 N 3199.90 N 14 E 0 40 3200 .41 1.35 N 7.65 W N 25 E 3249.90 0 30 3250 3299.90 7.44 W .14 1.73 N 0 28 N 32 E 3300 7.25 W .20 3349.89 2.04 N N 29 E 3350 0 22 7.13 W .19 3399.89 2.36 N 0 23 N 15 E 3400 .40 N 14 E 3449.89 2.78 N 7.02 W 0 35 3450 .49 6.96 W N 3 E 3499.89 3.20 N 0 22 3500 6.86 W .47 3.56 N N 28 E 3549.89 0 29 3550 .27 N 14 E 3599.89 3.96 N 6.70 W 0 30 3500 6.62 W .22 4.42 N N 4 E 3649.88 0 33 3650 6.58 W .13 N 5 E 4.94 N 3699.88 0 37 3700 .12 6.55 W N 0 W 3745.88 5.48 N 0 37 3750 6.04 N .19 6.52 ₩ NEE 3799.88 0 40 3800 6.54 W .41 3849.67 6.60 N N 11 W 0 35 3850 7.15 N 6.64 W .22 N 5 W 0 42 3899.87 3900 7.74 N 6.72 W .09 N 7 ₩ 3949.86 3950 0 39 .26 8.27 N 6.75 W 3999.66 0 33 N Ø W 4000 6.75 W .34 4049.85 8.82 N N 1 W 0 43 4050 Б.77 W .14 9.42 N 4099.85 0 39 N Ø E 4100 .28 4145.85 9.93 N 6.78 W 0 30 N 2 W 4150 6.75 ₩ .18 10.39 N 0 32 N 8 E 4199.85 4200 .07 5.71 W 4250 (10.85 N 0 32 N 4 E 4249.85 .47 4299.85 11.42 N 6.72 W N 7 W 4300 0 44 .20 12.03 N E.80 W 4350 0.39 и в ш 4349.84 .63 4399.84 12.62 N 7.00 W N 30 W 4400 @ 47 .37 13.23 N 7.27 W 0 43 N 17 W 4449.83 4450

FINAL CLOSURE - DIRECTION: N 28 47 W DISTANCE: 15.10 FEET

COMPANY : MARATHON DIL COMPANY

DATE : 23-MAR-8 SERIAL ND: EW0241

FINAL CLOSURE - DIRECTION: N 28 47 W DISTANCE: 15.10 FEET.

FINAL STOTION - TUD: 4449.83

7.27 W

•			٠.			*
Form 3160-5 (November 1983) (Formerly 9-331)	DEPARTMENT C			CHOR TE	Expires Augus 5. LEASE DESIGNATION	No. 1004-0135
	BUREAU OF LA	ND MANAGEMEN	T		U-31928 👌	<u>-l.</u>
SUN (Do not use this	IDRY NOTICES A	ND REPORTS or to deepen or plus PERMIT—" for such	ON WELLS	ervoir.	0309	~
1. OIL GAB WELL	OTHER Injecto	r	الما الما الما الما الما الما الما الما		7. UNIT AGREEMENT P	a
Marathon Oil 3. Address of Operator	Company		MAR 07 19	988	7 Tin Cup Mes	
P. O. Box 26	90, Cody, Wyomin	g 82414	DIVISION O		5-26	•
4. LOCATION OF WELL () See also space 17 bel At surface	Report location clearly and i	n accordance with any	State required entire	MING	Tin Cup Mes	
1375' FNL &	1635' FEL				111 CUP MES	MLK, AND
14. PERMIT NO.					Sec. 26, T3	8S, R25E
43-037-31368	15. ELEVA	TIONS (Show whether bi			12. COUNTY OR PARIS	ł
16.		5101' Ung			San Juan	Utah
	Check Appropriate	Box to Indicate P	Nature of Notice, !	•		
TEST WATER SHUT-O	·			AURAEQUE.	NT EMPORT OF:	
FRACTURE TREAT SHOOT OR ACIDIZE REPAIR WELL (Other)	MULTIPLE CO ABANDON® CHANGE PLA	DAPI.ETE	PRACTURE TRE SHOOTING OR (Other) See	ACIDIZING Below	ALTERING ABANDONM f multiple completion lon Report and Log f	CTRING CTRING
17. DESCRIBE PROPOSED OF proposed work. If nent to this work.)	COMPLETED OPERATIONS (C) well is directionally drilled	early state all pertines give subsurface loca	. data !!			
·				•		
			· .			
to a beaver Water Rights change the p	1988 notificatio access to the pe dam flooding the was notified opoint of diversio lonticello was no change.	rmitted water area. The S f the problem n to Cross Cr	source locat tate of Utah, and Mr. John eek (SW l Sect	ed in Sect Division Solem gra ion 25. T3	tion 35, T38S of Natural R anted verbal (38S, R25F)	, R25E due esources, approval to
			•			
	· ·					
•		.· ·				
BLM-Orig & 3	cc: UDOGM-2.	WRF. FMK. WTR	. Title & Con	tract (Hou	uston)	
IS. I hereby certify that SIGNED ROYAL STATES	the forestorms is this sed to		ulatory Coord		DATE March	3, 1988
(This space for Feder	al or State office use)					

*See Instructions on Reverse Side

APPROVED BY CONDITIONS OF APPROVAL, IF ANY:

November 1983) (Formerly 9-331)

SUBMIT IN TRIPL

Form approved. Budget Bureau No. 1004 Expires August 31, 1985

LEASE	DESIG.	MOITAN	AND	BERLAL
U-31			4.	

•	BUREAU OF LAND MANAGEMENT	0-31920 OF	1.
	SUNDRY NOTICES AND REPORTS ON WELLS (Do not use this form for proposals to drill or to deepen or plus hot by "APPLICATION FOR PERMIT—" to be a second or plus hot by the seco	6. IF INDIAN, ALLOTTEE	
1.	OIL CAR Thioston	7. UNIT AGREEMENT NA	
	WELL WELL OTHER IN COUNTY	Tin Cup Mesa	
2.	MAR 24 1988	8. TARM OR LEADE HAM	
	Marathon Oil Company	Tin Cup Mesa	
3.	ADDRESS OF OPERATOR DIVISION OF	9. WELL NO.	
	P. O. Box 2690, Cody, Wyoming 82414 OIL GAS & MINING	5-26	
4.	LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.)	10. FIELD AND POOL, OR	WILDCAT
	At surface	Tin Cup Mesa	
	1375' FNL & 1635' FEL	11. SEC., T., R., M., OR R SURVEY OR AREA	
		Sec. 26, T38	S, R25E
14.	PERMIT NO. 15. ELEVATIONS (Show whether Dr. RT. CR. etc.)	12. COUNTY OR PARISH	13. STATE
	43-037-31368 5101' Ungraded GL	San Juan	Utah
16.	Check Appropriate box to indicate Nature of Notice, Report, of	Other Data	
	TEST WATER SHUT-OFF PCLL OR ALTER CASING WATER SHUT-OFF PRACTURE TREAT SHOOT OR ACIDIZE REPAIR WILL CHANGE PLANS WATER SHUT-OFF PRACTURE TREATMENT SHOOTING OR ACIDIZING (Other)	REPAIRING W ALTERING CA ABANDONMEN	DHIB
	Car Da 7	140 04 141510	

Completion or Recompletion Report and Log form.) 17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work. 1

On March 16, 1988 verbal approval was acquired from Mr. Dale Manchester, BLM Moab, by Frank Krugh, Marathon, to use approximately 45 barrels of diesel as a mud additive in order to help recover stuck drill pipe. The diesel would be added to the mud system and recovered by vacuum truck from the pit. The BLM was also aware that the proposed setting depths of the casing may be changed due to adverse hole conditions.

BIM-Orig & 3cc: SUDOGM-2. W	RF. FMK. Drilling. Title & Contract	(Houston)
SIGNED RPM Rolla	•	DATE March 16, 1988
(This space for Federal or State office use)		
APPROVED BY	TITLE	DATE

Form 3160-5 (November 1983) (Formerly 9-331)

43-037-31368

DEPARTMENT OF THE INTERIOR SUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPL (Other instructions verse side)

Form approved.

Budget Bureau No. 1004-0135

Expires August 31, 1985

LEASE DESIGNATION AND BEBLAL NO.

U-31928
6. IF INDIAN, ALLOTTEE OR TRIBE NAME

San Juan

Utah

V NOTICES AND DEPONTS ON WELL

	SUNDKY	MOLICE?	AND	REPORTS	ON	WELLS	•
Do no	t use this form fo	r proposals to	drill or to	deepen or plug	back to	a different	reservoir.

	Use "APPLICA"	TION FOR PERMIT—" for such	g back to a different reservoir.	
1.	OIL GAR OTHER	Injector	PAJE (CLEUV) 5	Tin Cup Mesa
	Marathon Oil Company		MAR 2 4 1988	Tin Cup Mesa
	P. O. Box 2690, Cody,	Wyoming 82414	DIVISION OF	9. WALL NO. 5-26
4.	Location of well (Report location cie See also space 17 below.) At surface	early and in accordance with a	ay serie Weight Mining	Tin Cup Mesa
	1375' FNL & 1635' FEL		,	11. SEC., T., R., M., OR BLE, AND SURVEY OR AREA
	PERMIT NO.			Sec. 26, T38S, R25E
17.	Pacatr au.	15. ELEVATIONS (Show whether	DF, RT, GR, etc.)	12. COUNTY OR PARISH 13. STATE

G. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:			SUBSEQUENT REPORT OF:		
TEST WATER SHUT-OFF	PULL OR ALTER CASING		WATER SHUT-OFF	REPAIRING WELL	
PRACTURE TREAT	MULTIPLE COMPLETE		FRACTURE TREATMENT	ALTERING CABING	
SHOOT OR ACIDIZE	ABANDON®		SHOOTING OR ACIDIZING	ABANDONMENT*	
REPAIR WELL	CHANGE PLANS		(Other)		
(Other) See Below		X	(NOTE: Report results of multi Completion or Recompletion Re	pie completion on Well port and Log form.)	

5101' Ungraded GL

17. DESCRIEZ PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.).

On March 21, 1988 verbal approval was acquired from Mr. Dale Manchester, BLM Moab, to plug and secure this well bore in the following manner. The well is being plugged due to adverse hole conditions and stuck drill pipe. Operations will be suspended pending engineering evaluations.

Plugging and Securing Procedure

- 1. Cement drill pipe in hole with 494 sacks of cement. Cement top is estimated to be 3500'.
- 2. Back off fish at 2371' and set a cement retainer at 2200'. Pump 1000' of cement below the retainer and place 50' of cement on top of the retainer.
- 3. Suspend operations until evaluations are complete.

Mr. Ron Firth with the State of Utah is aware of this procedure.

BIM-Orig & 3cc: SUDOGM-	2, WRF, FMK, WTR, JLS, Title & Contra	act (Houston)
SIGNED RPM Dalay	TITLE Regulatory Coordinator	March 22, 1988
(This space for Federal or State office use)		
APPROVED BY		TED BY THE STATE
		TAH DIVISION OF
		GAS, AND MINING
to year out of the control of the co	*See Instructions on Reverse Side DATE:	3-25-88
T. 12 11 5 C Samuel 1001	BY: John	A Daye,
United States any false, fictitious or frauduler	for any person knowingly and willfully to make to a	ny department or agency of the

, , ,				Form, approved. Budget Bureau No. 1004-0	135
Form 3160-5 (November 1983)	UNI	D STATES OF THE INTERI	LOAD Instelletions	Expires August 31, 1985	×o.
(Formerly 9-331)		AND MANAGEMENT		U-31928	
		· · · · · · · · · · · · · · · · · · ·		6. IF INDIAN, ALLOTTEE OR TRIBE N	AME
SUNI	DRY NOTICES A	ND REPORTS C)N WELLS		
(Do not use this)	form for proposals to dril Use "APPLICATION FO	PERMIT	TETRIVICINI		
1.	- Hotesi		100 C	7. UNIT AGREEMENT NAME	
MELL MELL	OTHER WATER	Inject	- 10 1000	Tin Cup Mesa	
2. NAME OF OPERATOR		au Au	3 19 1988	Tin Cup Mesa	
Marathon Oil	Company	וח	VISION OF	9. WELL NO.	
P 0 Box 26	90, Cody, Wyomi	na 82414 m ilia	AC & MINING	5-26	
4. LOCATION OF WELL (R. See also space 17 belo	eport location clearly and	in accordance with any	State requirements.	10. FIELD AND POOL, OR WILDCAT	
At surface 1375 FNL & :		0 - 1		Tin Cup Mesa	
1373 FNL & .	1033 FEL	Re-Enter		BURYRY OR ARRA	
				Sec. 26, T38S, R25E	<u>.</u>
14. PERMIT NO.	15. ELE	ATIONS (Show whether pr.	RT, GL, etc.)	12. COUNTY OF PARISH 13. STATE	
43-037-31368		5111' KB		San Juan Uta	ih
1G.	Check Appropriat	e Box To Indicate N	ature of Notice, Report, o	r Other Data	
,	OTICE OF INTENTION TO:			ENQUENT ARFORT OF:	
•		· · · · · · · · · · · · · · · · · · ·		EXPAIRING WALL	1
TEST WATER SHUT-OF	PELL OR A	COMPLETE	WATER SHUT-OFF	ALTERING CABING	1
PRACTURE TREAT ENOOT OF ACIDIZE	ABANDON*		SHOOTING OR ACIDIZING	ABANDONMENT®	
REPAIR WELL	CHANGE PL	ANS	(Other)	7-10H046]
(Other) See Bel		<u> </u>	Completion or Reco	ults of multiple completion on Well ompletion Report and Log form.)	
17. DESCRIBE PROPOSED OR proposed work. If	COMPLETED OPERATIONS (well is directionally drill	Clearly state all pertinent ed, give subsurface locat	t details, and give pert <u>inent da</u> ions and measured and true ve	des, including estimated date of sizerin rtical depths for all markers and sones	perti.
nent to this work.) *		· ·		•	
		•	•		
•					
T! 1	6				
ine above re	eterenced well w	as previously	drilled. However,	during the drilling phas	e,
retainer was	recame Stuck and	i the lower por	ine and the hole wa	s lost. A cement plug as secured for future	ina
re-entry.	At this time. Ma	rathon request:	the and the note was	ter this well, kick-off	fwo
the existing	wellbore. dril	l to a Total De	enth of 5781' and c	omplete the well as an	110
injector. Ä	ttached please	find;	ppor or or our and o	omprese the werr as an	
1. A revis	sed 10 point Dri	lling Operation	ns Plan and casing	design.	
	oore Diagram. chematic.		,		
	ion Survey of ex	isting wellhor	· ·	_	
	of original dri		~ '	•	
·	. 5				
·		•		•	
	•				
RIM_Onia & 3	Rco. SIIDOCM 3	LIDE EMP LIT	D. Duilling 2 Till	e & Contract (Houston)	
18. I hereby terminy that	the foregoing is true and	correct	K, priling-3, 1111	e & Contract (Houston)	
SIGNED ROY	Mealon	TITLE Real	ulatory Coordinator	DATEAugust 16 - 19	188
(Into space for Freder	ed or State office use)		· · · · · · · · · · · · · · · · · · ·		
APPROVED DY CONDITIONS OF AP	PROTAL IS ANY.	TITLE		TED BYTHE STATE	
•			OF L	JTAH DIVISION OF	
Federal approv	al of this action			GAS, AND MINING	
	ore commencing	*See Instructions	on Reverse SiDATE:	8.29.88	
operations.			ev. /al	L. Sais	

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully so-make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

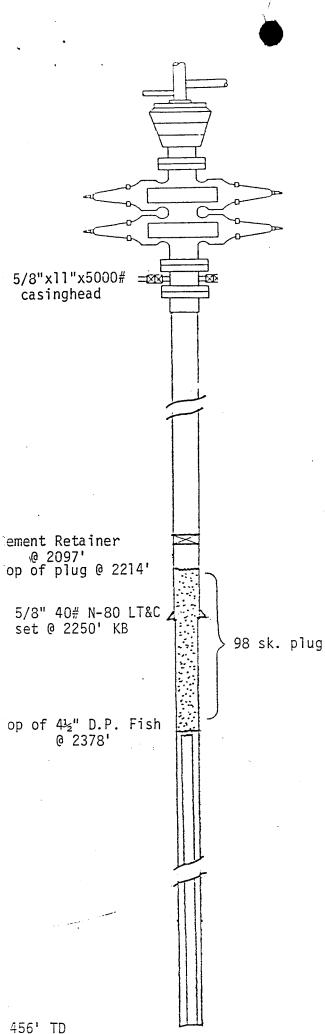


EXHIBIT 'E

Frocedure for Tin Cup Mesa #5-26 Re-Entry

- 1. MIRU drilling rig, N/U and test 5000# BOP stack.
- 2. Drill out cement retainer and dress off cement plug to 2255'.
- 3. Run leak-off test to ± 14.0 ppg EMW.
- 4. P/U $1\frac{1}{2}$ " bent sub and downhole motor assembly. Kick-off cement plug in S28E direction. Build to 5°. POOH.
- 5. P/U slick drilling assembly drill ahead to 5400'
- 6. Run logs. Run and cement 7" intermediate casing.
- 7. N/U and test 5000# BOP stack. Test casing to 2500 psi.
- 8. Drill out cement and shoe. Drill to 5405'.
- 9. Run leak-off test to +20.0 ppg EMW.
- 10. Drill and flow test Upper Ismay Formation.
- 11. Kill well if needed and drill to TD.
- 12. Run logs. Run and cement 5" liner.

CASING DESIGN

Well TIN CUP MESA AFE # 5-535-8 #5-26

	C1	,	Casina					Tensio	n - 100	0 1bs	Coll	apse -	PS1	Burst	<u>- 131</u>	5° i
Hole Size	Shoe	T.O.C.	(0.1).	Drift	Grade	Wt.#/ſt	Conn.	Rating	Load	S.F.	Rating	Load	S.F.	Rating	toad	3.1.1
121/4	1		1 1			40	LT&C	737	90	8.18	3090	_1170	2:54	_5750	3105_	1.85 51
ĺ	j	Surface		6,151	N-80	26.0	LT&C	519	111.7	4.64	5410	3791	1.43	7240	5000	
6 ¹ 4	5791	5000	5"	4,283	N-80	15.0	FL4S	241	4,4	_54.7_	7250	6032	1.20	3290	.5000_	1,66
								_								
								_							. ,	
														_		
								_								
												ļ		_		
									_					_	-	
	-													_	_	
													_	_		
	-		_	-												



	rathon Company		
DAILY DRILLING REPORT			
DATE STATE STATE WEAL MANE & NUMBER	San Juan	Tin Cup Mega	5-585-8
WELL NAME & NUMBER TO MAY 5-26	Y: YVITIAL	CONTRACTOR-RIG NUMBER	
7 1	5017 EE 5/11	Coleman #4 HOVE IN DATE SPUD DATE 3/2/88 3/3/88	25
SUMMARY OF OPERATIONS	Righeleased.		
Finish Niepling town BOP's.	Install blind flange	on willhead. a	ean
mud sits Ria redeased	3:00 P.M. 3/26/88	Total apth o	fwell 5457 H.
Finish Nippling Down BOP's. mud pits. Rig. redeased Top of fish 2378 Ft. Coment Plus	f/2378-2214/ Retainer	-@ 2100 ft. TOC 0	t 1990+t.
MUD INFORMATION	YP GELS. 0/10 FC %500	IDS SAND CHLOMOLECALCIU	M SALT PPM
COAR, INNIB. PPMOL > CM BHY	M1-MP-WL 1	SLOW PUMP RATES	
HYDRAULICS AND BIT	<u> </u>	5+u #	
PUMP PRESE. 1 GPM 2 JET NOZ. VEL.	ANNULAR VEL. DP/DC PUMP HO. 1	1 .	HO, 2 SPM
SOLIDS REMOVAL UNITITYPE WT OF WT UF	GPM SOLIDS REMOVAL U	HIT/TYPE WI OF W	T UF GPH
BIT NO. SIZE MAKE TYPE SERIAL NO. JETS/32	DEPTH IN DEPTH OUT FEET	HAS, RUN FT/HA CONDITION	REMARKS
RPM WT ON BIT	INOTARY TORQUE	USABLE BHA WT. IN MUD	
		PICE UP WEIGHT	
	DEF WEIGHT		
DRILLING ASSEMBLY - FROM BOT	TOM UP PONENT LENGTH O.D.	I.D. COMPONENT	LENGTH O.D. I.D.
		1.	
, , , , , , , , , , , , , , , , , , , ,		1,	
,		13	
	1 1 1	14	
1 1 10		15	DTAL BHA
TIME DISTRIBUTION - HOURS	OST CIRCLESMING INIG SERV. IW.O.O. IL	TO DE CASING WOC NIL	HID WASHIREAM
	MINER DINER	! ! !	9 THER TOTAL
CEMENTING CK. BOE CONDITION HOLE LOG	<u> </u>		9
INRS. ON JARS/SS HRS. SINCE L	AST INSPECTION BOP TEST DATE	LAST CASIRCIS	
HOURS OPERATIONS IN SEQUENCE	d tooks		
14		20/88	
King relea		26/23	
Find T.D. 5456 f.			
E. + 5.			
Frill B.	P.P. Retrieved 77	Tr. 175 and 4 26	-41
147,14.	D.P. Katerieva ()	Otad- Fine croc	efted.
	70		Ked.
(Lost Key	10-t		
DIRECTIONAL SURVEYS	TVE 1500R	DINATES IVERT.	SEC. DOC LEG
MEASURED DEPTR INAULE DIRECTION			

_ CUM 490577 DAILY MUD 0 CUM 03823 REPORT GIVEN Reserval DAILY WELL COST #573



DAILY DRI	LLING REPO	RT	COUNTYIPA		Tere	. 0.4864		TAFE NO.
3/26/88 WELL HAME & HUMBE	whah		ت سمک	Tuan		Tin Cup.	Mesa	5-585-8
WELL NAME & HUMBE	A 2/		500 >	ELEVATION	///	CONTRACTO	M-RIG NUMBER	-
Tin Corp Me	OTAGE 24 HAS	FORMATION	PRESENT	OPERATION	77	MOVE IN DATE	FPUD DATE	DAYS SINCE SPUD
1992 Ft.	,		Nipp	le down		3/2/88	3/3/88	24
SUMMARY	OF OPERA	TIONS						
WOC- RIH a	nd tage.	I coment	plua at a	7214 ff.	with 4,0	200 lbs.	(Plug soft	1). POOH.
WOC- RIH a Set Retain	7	2100 ft	Circ e	and set	- 46 sock	+ Nuo	from .	2100 Ft.
Jet Kelan	1 /	/ / /	//	1 1	·	1. P. J		
to 1990 F	t. Laydo	un dril	pipe on	2 begi	n pippl	ino de	JA.	
1990 f. MUD INFO WEIGHT VIS.	Mr CC	Fh Jev	YP G	ELS. 0/10 FC	N SOLIDI	SAND	HLOMOESCALCIU	M SALT PPM
CORR, INNIE.	i (i	HT-MP-WL		1	SLOW SUMP	i	
				<u> </u>		394		
HYDRAULI	CS AND BI	ZIJET HOZ. VEL	ANHULAR VE	L.DP/DC	UMP NO. 1	SPH	PUMP	10. 3 SPM
	1	_	•	ì			T OF WI	uf GPN
SOLIDS REMOVAL UNI	TTTPE W	tor will	ا جن الم	M SOLIDS	REMOVAL UNIT	NTYPE #	тоғ wi	1
BIT NO. SIZE MAKE	TYPE SERIAL	NO. JETS/32	DEPTH IN	DEPTH OUT	FEET HE	KS. RUN FT/HF	CONDITION	REMARKS
							_	
			1				111	
				1				
APH	WT DN I	alT .	POTARY TO	PROUE	<u> </u>	USABLE BHA	W1. IN MUD	
						IPICK UP W	EIGHT	
ROTATING STRING W	IGHT	SLAC	K OFF WEIGHT			PICK DP W	Eluni	
DRILLING	ASSEMBLY	- FROM BO	TTOM UP					ENGTH O.D. I.D.
COMPONENT	LENGTH	0.0. 1.0. C	MPONENT	LENGTH	0.0. 1.0	. COMPONE	47 ·	1 1
<u> </u>						Tì T		1 1
7						<u>hz</u>		
,	1 1	1 .	•		1 1	73		1
		,		1	1 1			1 1
4		<u> </u>					70	TAL SHA
5		1 1,	,			115		
DRILLING TRIP	TRIBUTION	EPAIR ICIRC.	LOST CIRCLEISMI	NG RIG SERV.	* .C.C. L/D	DP CASING	WOC N/U	HID WASHIREAM
GEMENTING CX.	100-01-	5/2	OTH	1 100	تم ا	THER	TOTHER O	42 THER TOTAL
1/2	DE COMBINO	THOLE ILOU	Lex	biarr 1/4			1 1	4
MRS. ON JARSISS	 i	HRS. SINCL	LAST INSPECTIO	N BOP	TEST DATE		95% 6 22	10E TEST 13.5 ppg
HOURS OPERATION	ONS IN SEC	UENCE		!		, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	17.8 = 22	30 377
71/2 11/19								
1 8/	H to 221.	4 54. 7.	e cemen	7 with .	4,000 16;	<u>. @ 32/</u>	4 Ft. Com	ent soft.
2/11 1 000	24	ens clatibe						
1/2 R/	H anighty by	alliburton	Ketainer.	. 3.1 11.	1000 ·	ft. from	1 top 07 re	tainer to public
2 10		r of 216				A		
1/2 160	ment with	4 Hallibur	ten and	Dowell_	46 3006	1 of C/.	to 1970 ff	-: Ph. 706- 1990 Ft
21/2 160	2-76 D-1	5. U-65	19.90 0	رور بريو . ورو	77.	JIVOFF.	18 17 18 F.	
U1/2 N/	pple des							
	· /· · ·							
				 				
		<u></u>						
DIRECTIO	ONAL SURVI	EYS						
MEASURED DEPTH		DIRECTIO	, H	TVD	(SDORDIN		VERT.	SEC. DOG LEG
<u> </u>	<u> </u>				:			
					i		l l	
	<u> </u>		<u> </u>				.	
 	21		50//					0 -4
DAILY WELL COST	213 12	_ cun _426, .	DAILY M	100 572	com _ /	7827	REPORT GIVEN _	RAL TAKEN THE



DAILY	DRILLI	NG REP	ORT		1county	PARISH			FIELDIARE.	A	<u>,</u>	AFE P	ю.
3/25/88	ļ	utoh			1 -	Tuen	TIAL	1	Tin C	الم حرية	RIG HUMBER		585-8
Tion Corp	DW BEA	5-2	6	G.L	5097	ENT OPERAT		′/	4	leman	UD DATE	***********	CT 8000
DEPTH	POOTA	SE ZA HRS	FORMATI	DN DN		OC - F			3/2/	BR	3/3/80	23	
5456 SUMM	ARY OF	OPERA	TIONS				<u>-</u> -						
TOC +1.	- 3462	· Po	rf@	4519.) Press	ure up	1 494)	not pe	orts :	40 10	00 psi.	No	flow.
1/2 (2		tion w	0 400	ulus.	Beel	1. 14	a+ 2	378 f	t. 4	nsuc	cestal	aften	1/
No comm	17.7 pg	t alua	in boi	Hom o	four	foce ca	sing.	Set 19.	9 009. 10	ment	plus in	easing.	WOC
MI CD I	14, 0,,,,,,	ATION		PV	IYP		6/10 FC		IDS 35A	HD CH	DADES CALC	UM SALT	PP#
			<u> </u>		HT-HP-W				į	SUMP AA	ļ		
DAR, INHIB.	PPW	OIL S	LCM	внТ			<u>; </u>			304 0			
HYDR	AULICS	AND B	Ti SiJET NO	Z. VEL.	ANNULAI	VEL DEIDE		UP HO. 1		.PM	PUMP	NO, 2	1 SPW
	<u> </u>			W1 UF		GPM	150,105	EMOVAL U	MIT/TYPE	wī	 	Y UF	GPH
SOLIDS REMOV		1	wt OF	1	ţ						COMDITIO	REMAR	
BIT HO. SIZE	MAKE TY	PE SERIA	L NO.	JE15732	DEPTH	IN DEPT	N OUT	EET	HAS, RUN	FT/KR	7 1 1	Ġ	
				1 1							1 1		
		-			_		$\neg \uparrow$				1 1		
RPM		WT 0H	BIT		HOTAR	T TORQUE	1		USABL	E BHA WI	IN MUD		
MOTATING STRI	NG WEIGH			SLACK	OFF WEIGH	1			100	C UP WEI	GHT		
DRIL!	LING AS	LENGTH	0.0.	1.D. CO	TOM UP	<u></u>	LENGTH	0.0.	1.D. CO	PONENT	1	LENGTH	0.D. I.D.
•				e		I_		1	- 11				
7									<u> </u>				
,			1 1					1_1					
			1 1	,		1		1 1	114				1
		***	1 1	1.		······································		1 1	,,,			TOTAL SHA	
TIME	DISTRI	BUTION	- HOU	RS	LOST CARCIE	ISHING PAR	SERV. I	*.0.0. IL	7D DP C	ASING	MOS INI) H/D	WASH/REAM
DRILLING TR	1/4			6 1/2		- 1	1	1	ı		6/2	OTHER	TOTAL
CEMENTING 344	CK. BOE	COMBIT	ION HOLE	LOG		Line YD. P.	1/2	Pert.	3-79	fair.	iner off		124
MAS, DR JARS	15.5		HF	S. SINCE	LAST INSPE	CTION	BOP	TEST DATE			45. EXSING! 95/9 "@		13.5 pps.
HOURS OPER			QUENC	E									
1/2	Prese	Test	D.P. a.	1 lin	er wit	L Done	7 12	600p.					
		om, G	releve		For	F. D.P.	<u>æ</u> .	519-4	<u> 520 7</u>	<u> </u>	60/20		.28 groom s
11/2	Press.	up to		05; 40	1 Bledo	1 6FF		0 1-2	Pmin.		V	· / , : -	
1/2	Back	SFF G	233	79 44	Riced		F 69				00-11	1 -1	<u> </u>
	POOF	1 Te	it as	ech B	-ill stee	r con	neeti	0075	44	460	POOH -	40 JL	
2	101	17 2	2704	*			· / ~	7 /~	6	-1-	15 mg.	10#	sond
_ = Vu	1 8:9 4	p Hell	o selt	9 9 2	Ti CFF	2 2 /s	Iell +	Jenne d	bark	thru	15 "E" C.P. fro	nunl	
	1 plu		emen]	 -									
21/2	c.re.	4 000,0	0- 00	well.	7/ ^	13 P-6	<u> </u>	98 seu	6, 19	720	<i>e</i> .		
3/4	Poot		plug	<i></i>	16 V-	~ <u>V 6</u>							
41/2	WOC		.2 3	78.46	Frot	D.P. 100	overer		.	779	77.jts	176000	(کمدیل کا نوکس
	1			ped it	from I	hating .	o x f = T	7218	۲4.				
DIR E	PTH AN		VEYS_	DIRECTIO		1140		EDOR	DINATES			1. SEC.	IDOC LEG
						1		:		1	<u> </u>		
						i		1		1			
-						1				<u> </u>			
						1		1		!			
DAILY WELL	cost <u>18</u>	7/2	CUM_	4644	132 DA	ILY MUD	3394	CUK.	9=8=	5 RI	PORT GIVEN	Ray	TAKEN THE
											K	03-47-	GRWIVIPI



DATE .	DAILY	DRIL	STATE		<u> </u>			COUPT	V-PARISH			FIEL	DIARE		~		AFE	NC.	
3/2	4/88		Uta	.4				50-	Juan	VATION		7,	56	9	Pesa-			-585-	
WELL 10	AME 4 9	UMBER	~	- 26				5097			C///		CONT	AACTOA	الله الله الله الله - البديميو				1
DEPTH	Cup	<i>०१ ७/५</i> ८ इक्स	TAGE 2	4 HRS	FORMATI	ON.	_نون	PRES	ENT OF EA	ATION		14	DVE IN	DATE	SPUD DAT	E	DAYS SI	HCE \$ PUB	
543	56	-						We	C				1/2/	88	3/3/	98	2	<u> </u>	
	SUMM	ARY	OF O	PERA	TIONS														
		سير		محرر			R~		200		400	"H"	0.6	بحريد	T	مرسور	·	78	- }
2	رمر ہ۔	16.	R	.An	64	no	ي	une	<u>e</u> y 4	20	720	محم	272	e-c-	50	no	4		
																			- {
4	476	£ 00	w	0C.		10			462		-07		7/-	<u> </u>					
WEIGHT	MUD I	IL.	WYI	EC	PH	PV		7.0	GELS.	0/10 F	۱	BOLIDS	NEA	HD DH	LONIDES	ALCIU	M SALT		P.F.W
9.3	/7.2								/				ل						
CORR. II	HHIE.	PP	MOIL '	•	LCMS	BHT		MT-MP-B	* L	١ -				UMP A	ATES		P	-	- 1
	HYDR	A 111 10		UD BI	T -	1		<u>. </u>		P -							P		
PUMP P	RESS.	AULIC	GP	W 01	S JET HO	2. VE	_	ANNULA	A VEL DE				5	PM	T _'	UMP N	0, 2	3.5	
		j _	1		<u> </u>]		15	½ <u>,</u>	8	<u> </u>		1 5	<u> 2 , 1</u>	14 UF	GPA	
	AEMOV	AL UNIT	TYPE	*	T OF		TUF	,	GPW	SOLIO	S REMOV	AL UNIT!	14PE 	w1	. 1	₩,	Ur	1	
Drsa.	SIZE	MARE	TYPE	SERIA	NO.	JEYS	132.	DEPTH	IN DEI	TH OUT	FEET	HAS	. RUN	FT/HA	COM	TION	REMA	RKS	\dashv
50.			-	1		1		1	1		1				<u> </u>				
				1		١.					i					1			
				 		\sqcup					-				1-1		+		
				1		١,		1	1			1			1	1	1		{
RPM	!	!	i	WT ON	BIT	لــــــــــــــــــــــــــــــــــــــ		ROTAR	T TORQUE			,	SABLE	BHA W	7. IN MUE	,			
													12:2		1CH7				
ROTATI	NG STRI	NG WEI	SHT			S.L	ACK O	FF WEIGH	1				FICK	UP WE	ion i				1
	5511	1110		MAIN	/ _ ED/		POTT	OM UP					ــــــــــــــــــــــــــــــــــــــ		· · · · · · · · · · · · · · · · · · ·				
COMPO	HENT	ING	LEA	IGTH .	6.5.	1.0.	COMP	ONENT		LENGT	н 0.0	. 1.0.	COM	POREN	1		ENGTH	0.0.	1.0.
<u>, بک</u>			1				6		1			1	7,1					1	
							İ					1	1					1 1	
7			1		1		17						177	· -					
,			ļ	- 1					Į		1	1	73			_1_			
-										· · · · · · · · · · · · · · · · · · ·									
4			<u> </u>				,						114				TAL BH	لــــــــــــــــــــــــــــــــــــــ	
			1	1	1		<u>.</u>				ı	ſ	1,5				894.		
<u> </u>	TIME	DIST	RIBU	TION	- HOU	RS	110						1.14						
DAILLI	NS TR	F	URVET	r IRIG F	EPAIR ICI	AC.	9		14	IG SERV.	w.o.o.	L/D D	, C4	SING	1314	W/U	H/D	WASH/REA	`*
TEMEN.	7176	(Ch. 100	<i>6</i>	ON DITIO	OH HOLE	, TE	06		OTHER RA	-d 10	THER	1 101	MER		THER	101	HEA	TOTAL	
1	1/4		`	3/	4	- 1			OTHER BI	1/2		1		1		1		24	
MRS. C	N JARS	/\$\$			HR	S. SIN	CE LAS	ST INSPEC	TION	80	OF TEST D	ATE			AST CAS			7 / 2	اجهرتر
														1	95/8	<u> </u>	250		200
					UENC														
	4	Circ		cono	tion 11	2.	6/	11	-trob	<u> </u>	¥ / ?	0661.	/11.	701	trote	5 m	ud	w/ R.Z	Pur
		1 115	1 D.	11/	a d.	!	100	561 c	Dacer	1000	2. /	712 22	00 ro	-2-5	61550	-74	/	47 . 470	4
		1 2-2	ر ۲۰	w. H.	1.5/2	20	-65	· ,_ /	0.4 %	· D-	13	D.,	p	00015	1150	0. 6.		Lelus	
		1 4	13.20	og:									<u> </u>		~			-	
-	E	wo.																	
1/2	<u> </u>	Blee	. 2 -	44	oress	400	٠												
		10.	H	1		1 b.	- /k	eff.	-T 2	2/8	ft.								
		1650	10	ut	2218	<u></u> ∕~c	sur	face	200	661.	muo	<u>. 10</u>	Cer	e er	1 in	cet	100	<u> </u>	
2		100		17/2	A:56														
5		Pin	40	Me	-oullo	ual		JE	ostma	n.					ب ور		501	£ 15	
		1445	0 1	Κ	•	/		/	25	,0 4	70 4	<u> </u>	3/4	•	1				
		Ru	te.	<u> </u>	urve	<u>1 5/</u>	200	00 - 4	1476	~	511	700		46.	<u> </u>				
9		We	20	<u>. 9</u>	1260,							· · ·							
		!												· · · · · · · · · · · · · · · · · · ·					
																		<u> </u>	
-							· ·												
-		 																	
	DIRE	CTIO	NAL !	SURV	EYS														
MEAS	URED DE				!	DIREC.	TION		[TVD		10	DORDINA				ERT. S	LC.	1000 1	.EG
-		<u> </u>							- !						<u> </u>				·
-									1		<u> </u>		\dashv						
-					i			-											
							-		1				į						
<u> </u>																			

Kosentral

GRW/vip/86



	1								л C	ath om	on pany						:	
DAIL	DRIL	LING	REPO	RT			Jeou's	**************************************	5 h			[#1 # (#	AREA				AFE NO	<u>s.</u>
DAIL) ATE 3/23/68 VELL HAME A		44	-4				5	40 J		TIPE		7,	~ C.	10 P	RIG HUM	BEA	5-3	585-8 Espub
Tin Cup	Mes	_ 5	-26			a	509	7	ļ,	. 3	111		Co	lema	24	/ 	THE BILLY	T SPUD
EPIN /	10	TAGE 1	E HRS	DAMA	Trans		PRE	LEENT D	PERATI C	104 C & 2	et.	, MO	VE IN 1 3/2/J	PATE	3/2/8	e	21	
SUMA SUMA	ARY	OF O	PERAT	IONS	5	7												
CIA	-00	ME		que		سمعت	10/70	م ر	406	~	, was	77	ىرە	ce	<u> </u>	4		
											,							
MUD	INFOF	TAME	ON CCIP	, h	PY		YP	GE		0/10 F	<u> </u>	IOLIDS	SA	(D CH	ORIDES C	ALCIUM	SALT	Pri
MUD VEIGHT 19.3 COAR, INHIB.	65	10.	8	7.5	6/		4/ HT-HF	9	12.	3	3 14	4.0	17/	VMP RA	1000 1	200		
					1		1			P _			<u>;</u>	-4 -			9.0	 ,
HYD	AULI	CS AN	ID BIT	JET R	OZ. VE		ANNUL	AR VEL	DP/DC		PUMP NO.	1	5	-	7	UMP N	0. 2	SPM 1 (1 m)
500	140	23° I	193	25	w)	GPM		SOLID	DIMP NO.	UNIT/I	YPE	27 ₩1	15%	2 <u>v</u>	Uf Uf	GPH
Dosandor NI HOLISIZE			1				1566		150.00	0-1	Her FEET	THE S	-	FYTHA	1		REMARI	
HT MO. ISIZE	MAKE	TYPE	SERIAL	NO.	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		DEF		0271	1001					7 .	<u></u>		
<u> </u>		İ			Π,	I							- 1		1	1		
	 	 									1				1	1		
RPW .	1	1	WT OH B	иŤ	لــــــــــــــــــــــــــــــــــــــ		ROTA	ART TOR	OUE		<u> </u>	-' 0	SABLE	BHA WI	. IN MUE			
AOTATING ST	IING WE	IGHT			15.	ACK	OFF WEIG	int.					PICK	UP WEI	GHT			
					-	BOT	TOM	i D										
DRIL COMPONENT	LING	ASSE	MBLT IGTH	ō.b.	1.0.	COM	PONENT	··	,	LENGT	н О.D.	1.0.	CDM	PONENT		1	ENGTH	0.0. 1.0
, Same						•						1	-					
•						7						1	<u> </u>					
3					<u> </u>							1	ha		 			L
		1	i		L	,		-	1				<u>,,</u>				AL BHA	
		1			ı				1			1	١,,				994.3	7
TIM!	DIST	RIBU	TION	- HO	URS	- 14	DST CIRC	FISHING	RIG	SERV.	. [w.o.c.	LID DE	ICA	SING	₩05	H/U	H/D W	ASH/REAM
l i								OTHE	1 _		THER		HER		THER	107	HER	TOTAL
CEMENTING	CK. B	OE C	24		- 1	56								1				124
HRS. OR JAR	\$/\$\$			[IRS. SIP	ICE L	AST INSP	ECTION		180	OP TEST DA	TE			7 % 6	יבב כ	OE TEST	13.5 100
HOURS OPE	RATIC	NS IN	SEO	UEN	Œ			· · · · · ·			7							
<i>1</i> 4	150	c + c	ond:		5	140				عص	<u> </u>							
	-	Mix.	, , , , ,	men	tat		:00 A.	149										
						_												
	1																	
	1																	
	1_																	
	\pm																	
	1																	
	İ																	
	1																	
	+-					_												

DIRECTIONAL SURVEYS COORDINATES IVERT. SEC. IDOG LEG DIRECTION ITVE

DAJLY WELL COST 4943 CUM 412958 DAILY MUD 661 CUM 89431 REPORT GIVEN KALL TAKEN THE

GRW/vip/86



DAILY	DRILL	ING F	REPORT		Icou	TYPARIS	·		FIELD	ARLA			AFE NO.	
7/22/8/	9		4		5	an Jua			7/	n Cup	Nesa.	<i>-</i>	5-50	95.8
					C0.	E	EVATION	-111	,	ONTRACT	DA-RIG NUS	BER		1
Tim Cup	o Nics	162 34	5-26	ATION	307	ESENT DE	BATION 2	///	(MO)	E In DATE	TEPUD DAT	<u> </u>	AYS SINCE	5 P U B
5456	1	0	Uppe	- Ism	ey c	INCUL	ATT 50	ارمدن	2000/ 3/	2/88	3/3/8	P	20	
SUMM	LARY O	F OP	FRATION	15										
											ur 2	عرد	-	-
JAR	_0~		5 M 20	-ITH .	vo.	Succe	<u>-27 · </u>	04	0= 0					
1/10		45-	z 7	2015	AND	on	u	مدر	، مسبر	121	H w	1724	onse	CMAE
Ano.					,,		- 3/	"			/ 10	JU	10	ļ
Ano	Sca	ov	مرسرا	1750	R	- 02	219	6	VALE	NIN!		7 7		
MUD	INFORA	TWE	DO DECIPE	IPV	TYP.	GELS	. 6/10 F	: 1	SOLIDS	NEARD	DILONDES	ALCIUM	SALT	PPM
/9.2	68	10.	4 11.5	60	42	10	124 .	3	44.0	7-	14500	180	<u> </u>	
DAR, INNIE.	PFW	OIL >	LCM	BHI	HT-HP	-WL	١٠ -		\$1	OW PUMP			>=	į
		- A A I	D BIT	!						3P# (
HYDH	AULIC	GPM	2 JET	NOZ. VEL.	ANNU	LAR VEL.DI	/DC	PUMP N	C. 1	\$PM	'	NA SMO). 2	SPM
		1_					l l		AL UNIT/TY			- X		GPM -
SOLIDS REMOV	AL UNIT/	YPE	WT OF	WY (<i>)}</i>	GPM	SOLID	S REMO	VAL UNIT/TY	1	w1 0-	w.,	1	}
BIT HO. SIZE	IMARE IT	YPE S	SERIAL NO.	JETS/32	IDEP	TH IN ID	EPTH OUT	FEET	HAS.	AUN FTIN	A CONE	OITIO	REMARKS	
				1 1	1						11			
	1 1			<u> </u>							\neg	,	ĺ	
	 				- - 			+						
1		}		1	1)		1	1	1	1		L	
APE .	٠	1**	T ON BIT		ROT	ARY TORO	J.E		us	ABLE BHA	W1. IN MU)		
				12772						PICK UP	WEIGHT			
ROTATING STR	ING WEIG	MI		SLAC	K OFF WEH	64 I							•	
DRII	LING A	SSFA	ABLY - F	ROM BC	TTOM	UP								
COMPONENT		LENC	37H 0.D.	1.0.	DMPONENT		LENGT	н о.	D. 1.D.	COMPONI	ENT	LE	NGTH (.a., .a.
Bit		1.0	177	,						77		!		
, 546		13.5	0 16/4	12%,			1			1,2		1	1	
, 24 = 20	: .	709	7.23 64	128			1	1	1	13		1		1
6xHW	שמ	120	1014%	12%			t	1	1			ı	1	- 1
. 6x700	<u> </u>	100	.60 1 7 2	1-20						114		TOT	AL SHA	
•		1	1	1 10	,		1	_1_		15		10	794.33	,
TIME	DISTR	IBUT	ION - H	OURS	NOCT OR	TELEBRAS	IBIC CERL	1500	iun ne	ICASIMO	1902	N/U I	N/D WAS	HIREAM
DRILLING TH	34	DRAFA	NIG REFOR	,		103/4	l Jenn						ļ	
CEMENTING	ICK. BOE	100	M DITION HO	LE LOS	·	OTHER	101	MER	DTH	ER	DTHER	OTP		TOTAL
}			71/2	- 1							LAST CAS	1		24
MRS. ON JARS	5/55			HRS. SINCE	LAST INSP	PECTION	186	P TEST	DATE		776	224	-0' /	3.5 - 9
HOURS OPE	RATION	S IN	SEQUEN	ICE			······································				1			
2	1 RIH													
61/2	Jor	e- #	·36					,				, , ,	1. Istre	<i>,</i>
3	Displ	ace :	Proe Fra	# 12 FF.	-/4/5/_	aut e	7 601		2300	O stre	4e ./	200	. / Tire!	<u> </u>
214	F00	H	100 22	18 5-5.			· · · · · · · · · · · · · · · · · · ·							
/	1200	وسرو	12 D.	C. 4 F.	ih too	15.								
11/2	RIH													
2	Cire.	·	700	uese Fr		= 14. "	- 4	16	4480+	2×.				
4	16/6	2	1 100 %	the hal	J 1. 0	100.								
<u> </u>	 			3/21/20	9:0	0 F. M.			450	5				
 	+						1- 2 4-2		1850				<u> </u>	
	1													
1	4									5 42			/25	526 S.
	1							311	<u> </u>	372			04,	
	† 	-						CO. h		45 4				
	1													
	+													
DIRE	ECTION	2 IA	URVEYS						· · · · · · · · ·					
MEASURED DE				DIRECTIO	R	CVT		js	COORDINATE	5		ERT. SE		DOG LEG
•												·		
i											<u> </u>			<u> </u>
1									·····		,			
1		· .		1										
														Ī
								1						
	//	دءه		4000	15		280	i	ي ور	770				
DAILY WELL	COST //	<i>9 §</i> 2	cu	4060	<u>/5</u> 0	AILY MUD.	280		ии <i>ВЕ</i> .	770		VEH K		KEN TH



DAILY DRILLING REPORT	COUNTY PARISH	FIELD AREA	AFE NO.
3/21/88 Utah	San Juan	Tin Cup Mera	5-585-8
		CONTRACTOR-RIG NUMBER	Í
Tin Cup Mera 5-26 or	3097 Kg 5///	Coleman 7	SAYS SINCE SPUD
Tin Cap Mera 5-26 DESTH 5456 OUPPER JOHNSTON OUPPER JOHNST	Stuck Pipe	2/2/00 3/3/80	19
7776 Upper Harry	1 1122	11/00 11/08	
SUMMARY OF OPERATIONS			
T.O.F. 2218.	-H, CHANCE ON	T THAS TH	IICE.
T.O.F. 2218.	PIPE FREE	AT 2371.	
MUD INFORMATION	TP IGELS STORES INCO	LIDS SEAND DILOMDERCALCIUS	SALT PPM
WEIGHT VIS. ML CZ AN P. 19.3 64 10.8 7.0 55	44 9/22 3 44	1.5 14 14500 200	
COAR, INHIA. PPHIOIL & LCHE BHY	HI-HP-WL 1	SLOW PUMP MATES	PN
		5 P W #	P 9/
HYDRAULICS AND BIT		SPM PUMP N	Q. 2 SPM
PUMP PRESS. 1 GPM 2 JET NOZ. VEL.	ANNULAR VELIDPIDC PUMP NO. 1	1	1
SOLIDS REMOVAL UNIT/TYPE WT OF WT UP	GPM SOLIDS REMOVAL	UNIT/TYPE WT OF WT	UF GPM
SOLIDO NEMOTRE DIVINITI		. 1	J
BIT NO. SIZE MAKE TYPE SERIAL NO. JETS/32	DEPTH IN DEPTH OUT FEET	HRS. AUN FT/HR CONDITION	REMARKS
		1 1 1 1 1 1 1	
		1 1 1 1 1	ļ
	ROTARY TORQUE	JUSABLE BHA WT. IN MUD	1
RPM WT ON BIT	NOTARY TORQUE		
ACTATING STRING WEIGHT SLACK	OFF WEIGHT	PICK UP WEIGHT	
		1	
DRILLING ASSEMBLY - FROM BOT	TOM UP		
COMPONENT LENGTH C.D. I.D. COM	ONENT LENGTH O.D.	I.D. COMPONENT	ENGTH O.D. 1.D.
D.P. 176.68 14/21 1	7× D.C. 216.55 64	27P h1	
, X-over 11.60 16 1214, X		2/4	1 1
		7 h2	
: Bumper jars 16.20 16 12 . A	cceler 1910 16" 1	2	1 1
			
. Oil Ins 112.25 6 2 , X	-over 11.70 16" 1	241.	
		101	AL BHA
X-over 11.27 16/4/21/4 10			279.83
TIME DISTRIBUTION - HOURS	AT CREEKING INC CERT IN C.	ID DP ICASING INDO 1477	N/D WASH/REAM
TIME DISTRIBUTION - HOURS DRILLING TRIP SURVEY RIG REPAIR CIRC. 194	12 3/4	170	
CEMENTING ICK. BOE CONDITION HOLE LOG	OTHER OTHER	OTHER OTHER OT	HER TOTAL
			124
MRS. ON JARSIES MRS. SINCE LA	ST INSPECTION BOF TEST DATE	LAST CASING/SHI	DE TEST
		9% € 22.	50' 13.5 ppg.
CURS OPERATIONS IN SEQUENCE			V-
1/4 Frek off 2218 The Fre	e @ 2371 ft. Stuck	tomediately below ?	37/47.
4 FOOD - RIH Chen	e out sers break circ	<u> </u>	
1014 SOF en life cort Fail	ee.		
2 Ri- vo 3-point fork	off@ 2218 Pt.		
3 FOOTH Change out ier			
	ailed.		
13/4 1 Kun 3-Point			,
11/4 Circ stop SST 40 to	casing this (approx.)	Teck 2200 pri :	e move fluid.
635 strakes			
3 FOOH Charles of 0	7 =	6.440- 1214 4 1	Theiras
3 FOOH Chance of a	scelerator IJans and I	rection local of or	ipipa.
Rock ground gas t	(09, (.		
3-20-88	12:15 PM		
	7-25 2040		
	1-25 500		
	1-25 1720		
1	Tololici 276366.		······································
DIRECTIONAL SURVEYS			- in the second
WEASURED DEPTH ANGLE IDIRECTION	TVE JODOR	DINATES VERT. SI	EC. IDOC LEG
	1 ;	1	
		i	
		The state of the s	
			1
DAILY WELL COST 7881 CUM 39403		52490 REPORT GIVEN	



Gentle fine

Rosenthal

GRW/VIDIE6

	AILY	DRIL	LING	REP	ORT		COUNTYIE	A 0: L n			TELLD	AREA				AFE NO	ž.	
3/20	188	DRIL	Uta	4			154-3	Juga			7.	, C.	n M	RIG HUMB		5	<u> 585-</u>	ع
ELL NA		UMBER						ECEVA		-111	- 1	CONTR	lema	RIG HUMB	* * * * * * * * * * * * * * * * * * *			
DEPTH	ص	7	TAGE	4 HRS	CG FORMATIC	DN IGL	5097			7.,	140	E IN	DATE	PUD DATE 3/3/86	, 6	IS SINC	<u> </u>	
	LIMM	4 B Y	OF O	PFRA	TIONS		Street	مر، مرب	<u>e</u>		1 5	/4/2		3/3/00		-0		
							4 6			7			200	*	~~.		-	1
	DA					WITT												
	210					7 1												
	م <i>شر</i> و	=	74	- 2	2218	'An	o Tr	-10	78	بهم	ANGE	=	009	TA	کیسمر			ئـــــ
N EIGHT																		PPM
19.3		70	10.	8	11.5	PV	40	12/2	6	3 4	4.5	1/4 OW P	4 /7	185	00	l		
			-		1	1			- k				• • • <u> </u>			P#]
	HYDR	AULIC	S AN	D B	SUET NO	Z. VEL	ANNULAR V	ELDPIDO	•	UMP HO.	1	51	- м	PU	MP NO	, 2	. 81	M
		1	1		1	WT UF	1		1		i				₩.	if .		<u> </u>
				l		i	1]			- 1				1		
BIT NO.	SIZE	MAKE	TYPE	SERIA	L NO.	JE12/32.	DEPTH IN	DEPT	H DUT	FEET	HAS.	RUN	FT/HA	CONDIT	. 9	REMARK	\$	
				 		1 1					_	\neg		1				
														┼				
											1	لِــِـ		. IN MUD	1	L		
RPM			Ì	WT DH	BIT		POTARY	TOROUE			0.5	APLE						
ROTATIO	NG STR	NG WEI	GHT			SLACK O	FF WEIGHT					PICK	UP WEI	GHT		,,,,,		
	DRIL	LING	ASSE	MBL	Y - FRO	OM BOTT	OM UP					I						
COMPO	HENT		LEA	GTH	5.5. 14名1·	1.0. COMP 2 4/ 6 X	ONENT	1	LENGTH 1.78	1 6"	۱.۵. 44 عرا	COM	POHENT		1	NGTH 	0.0.	1.5.
•	7		1			2 , he	ven, 6×7		2/2						1			1
											12"	, ,		.,				!
, 0:1	Jar.	1	16.8	0	16 1.	2 , X	-over		1.30	18	124	13				!		<u> </u>
X- 0	سوم ں		11.2	-7	1641.	24,				1	1	١, ۵			1			!
					16/41.			·····		1	1					97.7	/	
	THEF	DICT	01012	LICAL	- 4011	DE			FCDV		1 15 54	TC 4.5	LINC.	IWO: IN	(1)	N/D IW	ASH/RE	A.W.
SAILLI	-	34	SUNVEY	F. C.	HEPAR CI	RC. LO	14	′′′	SERV.									
CEMEN	TING	CK. 80	EC	ONDITI	ON HOLE	LOG	8	HERAPPE	GH.	1ER 12.44	ואנס קר	ERSEM	1/2 0	THER	ОТН	ER	TOTAL	•
HRS. O	N JARS	155			HR.	S. SINCE LA	ST INSPECTI	OH .	80	TEST DA	TE		15.4	ST EASING	6/540		, , ,	
CURE	OPFE	OITAS	NS IN	SEC	UENCE				<u> </u>	·		_		7 % 6		50	10.0	409.
61/2	_	Jan	-,'0 = 6	fow	v						=							
/		Fre	4 / 1	7.01 4 G	218	Tree E	2322	7	Sin.	. <u> </u>	6 F F.							
31/2	2	100	H															
1/2		Scre	ار کر ہ	1/2	Fi, L a	nd bre	t cir	· c										
1		Jon	وديمة	<u> </u>	. که وزوکر در که راه میر	Up &	down,	2218	/ (.		Free	· @		371 1	Υ.			
		1	7015	Torre	J 15 14	10010	in les	7 24	455.									
					3/19/	8 9:0					2:45		77					
						7-2 1-25	ع و	50			206							
		ì				4-25		60			1725							
		-				-	Total :	In i	121	5 661	Sine	٠٠ ،	's inet	in r	e - 4	torto	J.	
													/ -/					
		-		Fee	Keroun.	. ا <u>وجو کم</u>	- 2 Uni	(f										
		1																
		<u> </u>																
MEASU		CTIO		SURV	EYS	PRECTION		TVC		150	DRDINATE	S		I V E	RT. SE	ς.	DDG	LEG
1		<u> </u>												i				
					<u> </u>			1				1						
								1									-	
		1						1				-						
			رعر 🔾 د	: 4		182152	_		95		941	68	•		. 18	â	****	TH
CAILY	WELL C	:0\$T	-206	7 /	cuw	0	DAILY	MUD	<u> </u>	CU	·		REF	PORT GIVE	×	` ` ` 	IAKEK.	



		V DRIL		REPO	DRT			COUNTY	PARISM			FIE LD. A	NE A			1	FE NC.	~
7/16	9/8	PNUMBER	UT	44						AN				15	124		5-5	25-8
-ELL K	AME &	NUMBER				21	T	509" " 509"	ELEV	ATION	- , , ,	50	NTRACTO	A-AIG N	UHBER	4		
11	<u>، کہ ا</u>	cur	ه دمر	BA	- د	-4	خوا	507	/	5e 3	///	1MOVA	IN DATE	\$200 D	ATE	DAY	SINCE	\$100
DEPTH	1	, ~	-		UPLA	u., Z.,	م در د	4 57	ruck	- 011	سيع	3/2	188	3/3/	140		17	
3 7	SUMA	VARY	OF OF	PERA	TIONS			<u> </u>										
							_	/					>- 5	~~	011	12-		
	C/2	CVL	ME		C 62~	10/	770~	Ho	ce.	رد	0116		<u> </u>		~"	<u> </u>		
	. د. ه	ر سی	-nc	سرجة	z A	L.6	N	<u> </u>	10	SUR	-	7	JA.	~_^	M	صہ		
									-Z									
					0~		1/10	<u>e. </u>										
	MUD	INFOR	MATI	ON		Ta v		YP	TARLE	A/10/FC	1880	- IDS 13	SAND K	HLORIDE	SCALC	IUM S.	AL1	PPH
WEIGHT		VIS. 7	1	4	10.5	-	2	33 HT-NP-WE	7/2	2 3	4	6.0	4	147	124	0		
<u> </u>	<u> </u>	13	HOIL 3		LCUN	BHT	_	HT-HP-WL		1,		\$LD	W 2 U M 2	ATES			_ pN	
			- (, _			3PM #				<u> </u>	
	HYDI	RAULIC	S AN	ID BI	T								SPM		PUM	P HO. :		304
PUMP F	PRESS.		- 641	_	2 JET NO	3Z. V£1	-	ANKULAR	VE L. DP/D			1	•	1		_		1
SEL INC	AF HO	VAL UNIT	TYPE	- W	IT OF	w	יוט די	٠	PM	SOLIDS	REMOVAL	UHIT/TYP	t w	1 Of		WT UF		GPM
				1		1		1		-			1		1			
B:7 NO.	. SIZE	MAKE	TYPE	SERIA	L NO.	JETS	/32	DEPTH	DEP	TH OUT	FEET	HRS. AL	H FT/HR	700	A DITIO	"a "	EMARKS	
ĺ								_ļ										
				1		١,	1 1		ł	İ		1		1	1			
				 		+	Щ.					 	+	1		\neg		
	1		1	1		1	1 1											
		1	1	WT ON	BIT			ROTARY	TORQUE			USAI	LE BHA	MT. IN M	UD			
			لــــــــــــــــــــــــــــــــــــــ									<u> </u>	ICK UP W	EIGHT				
ACTATI	ING ST	RING WEI	GHT			15.	ACR D	FF WEIGHT				ı i	er #					
	0011	LING	ACCE	ARDIN	/ _ ED	~!	BOTT	OM UP										
COMPC	DHIL		LEN	GTH	0.0.	1.5.	COMP	DHENT		LENGTH	0.0.	1.0.	DAPONE	(1		LENG	TH .	0.0. 1.0.
*			1		1				1			<u> </u>	,			l		
			_									. 1					1	1
,					<u> </u>		<u> </u>		I			<u> </u>	?			<u> </u>		
1							1				,	, [ı	1	1
							- •											
							1											
					l i		١.		- 1		1	ı ,	4			!		
					!!		 - -		1		<u> </u>	<u> </u>	4			TOTAL	BMA	
5			1		! <u>!</u>		10				<u> </u>	! , ! ,	5			TOTAL	BMA	
5					HOU	IRS		ST DECIFIS	nies (Ri	G SERV.	w.c.c.			Two		<u>!</u>		SHIREAM
1	ING T	RIP	SURVEY	RIS	REPAIR	IRS IRS.	120	ST DROFTS	ning Ri			LID DP	CASING	i	. N/4	<u> </u>	D WA	
i	ING T	RIP	SURVEY	ON DITE		IRS IRS.	120	17	MING RI			LID DP	CASING	i	. N/4	<u>!</u>	D WA	TOTAL
CEMEN	NTING	CK. 80	SURVEY	RIS	ON HOLE	IRS	06	<i>V7</i> 	THER	123	£ \$ 500/ 2 5/7	OTHER	CASING	OTHER	- N/1	OTHE	D WA	
CEMEN	ING T	CK. 80	SURVEY	ON DITE	ON HOLE	IRS	06	17	THER	123		OTHER	CASING	i	- N/1	OTHE	D WA	TOTAL
CEMEN	NTING	CK. 80	SURVEY DE C	ONDITI	ON MOLE	IRS.	06	<i>V7</i> 	THER	123	£ \$ 500/ 2 5/7	OTHER	CASING	OTHER	- N/1	OTHE	D WA	TOTAL
CEMEN MRS.	NTING DR JAR	CK. 80	DE C	ONDITE	ON HOLE	IRS.	DG CE LA	V7	THER	01 n	ER SAD!	OTHER	CASING	LAST C	ASING	OTHE SHOL	D WA	TOTAL
MRS.	NTING OR JAR	CK. 80	DE C	ONDITE	ON HOLE	IRS IRC.	OG LA	ST INSPECT	THER	1015 160F	ER SAD!	OTHER	CASING	LAST C	ASING	OTHE SHOL	D WA	TOTAL
MRS.	NTING OR JAR	CK. 80	DE C	ONDITE	ON HOLE	IRS IRC.	OG LA	ST INSPECT	THER TON STOCK	I GOP	ER SON/ 2 S/ TEST DAT	OTHER I P	CASING PC	LAST C	ASING)	JOTHE SHOL	D WA	TOTAL
MOURS	NTING THE OR JAR	RATIO	NS IN	I SEC	ON HOLE ON HOLE OUENC CO.	IRS IRC.	OG LA	ST INSPECT	THER TON	017 18 OP	ER SAD/ 2 S/ TEST DAT	OTHER IN	CASING PLAN	LAST C	ASING)	OTHE SHOL	D WA	TOTAL 24
MOURS	NTING OR JAR	RATIO	NS IN	ONDITH	ON HOLE ON HOLE ON HOLE OUENC	IRS IRC.	OG CE LA	ST INSPECT	THER TOA TOA TOA TOA TOA TOA TOA TOA TOA TOA	00 m	TEST DAT	OTHER DIFFE	CASING PLAN	CAST C	ASING	JOTHE STATE OF THE	D WA	TOTAL 24
MOURS	NTING THE OR JAR	RATIO	NS IN	ONDITH	ON HOLE ON HOLE OUENC CO.	IRS IRC.	OG CE LA	ST INSPECT	THER TOA TOA TOA TOA TOA TOA TOA TOA TOA TOA	00 m	ER SAD/ 2 S/ TEST DAT	OTHER DIFFE	CASING PLAN	CAST C	ASING)	JOTHE STATE OF THE	D WA	TOTAL 24
MOURS	NTING THE OR JAR	RATIO	NS IN	ONDITH	ON HOLE ON HOLE ON HOLE OUENC	IRS IRC.	OG CE LA	ST INSPECT	THER TOA TOA TOA TOA TOA TOA TOA TOA TOA TOA	00 m	TEST DAT	OTHER DIFFE	CASING PLAN	CAST C	ASING	JOTHE STATE OF THE	D WA	TOTAL 24
MOURS	NTING THE OR JAR	RATIO	NS IN	ONDITH	ON HOLE ON HOLE ON HOLE OUENC	IRS IRC.	OG CE LA	ST INSPECT	THER TOA TOA TOA TOA TOA TOA TOA TOA TOA TOA	00 m	LER SOU! SPI TEST DAT ME 160 MO MO MO MO MO MO MO MO MO M	PIPE	CASING POLICE POLICE SOLUTION SO	LAST C	ASING!	OTHE SHOE	TEST	24
MOURS	NTING THE OR JAR	RATIO	NS IN	ONDITH	ON HOLE OUENC S CO Physical Color of the color of the	IRS IRC.	NCE LA	VI ST INSPECT	THER TOA TOA TOA TOA TOA TOA TOA TOA TOA TOA	00 m	LER SOU! SPI TEST DAT ME 160 MO MO MO MO MO MO MO MO MO M	OTHER DIFFE	CASING POLICE POLICE SOLUTION SO	CAST C	ASING!	OTHE SHOE	TEST	24
MOURS	NTING THE OR JAR	RATIO	NS IN	ONDITH	ON HOLE OUENC S CO Physical Color of the color of the	IRS IRC.	NCE LA	VI ST INSPECT	THER TOA TOA TOA TOA TOA TOA TOA TOA TOA TOA	00 m	LER SOU! SPI TEST DAT ME 160 MO MO MO MO MO MO MO MO MO M	PIPE	CASING POLICE POLICE SOLUTION SO	LAST C	ASING!	OTHE SHOE	TEST	7
MOURS	NTING THE OR JAR	RATIO	NS IN	ONDITH	ON HOLE OUENC S CO Physical Color of the color of the	IRS IRC.	OG CE LA	VI ST INSPECT	THER TOA TOA TOA TOA TOA TOA TOA TOA TOA TOA	00 m	LER SOU! SPI TEST DAT ME 160 MO MO MO MO MO MO MO MO MO M	PIPE	CASING POLICE POLICE SOLUTION SO	LAST C	ASING!	OTHE SHOE	TEST	24
MOURS	NTING THE OR JAR	RATIO	NS IN	ONDITH	ON HOLE	IRS (100) L C C C C C C C C C	INCE LA	VI ST INSPECT	THER TON	00 m	LER SOU! SPI TEST DAT ME 160 MO MO MO MO MO MO MO MO MO M	PIPE	CASING POLICE POLICE SOLUTION SO	LAST C	ASING!	OTHE SHOE	TEST	7
MOURS	NTING THE OR JAR	RATIO	NS IN	ONDITH	ON HOLE	IRS IRS	IDO OS INCE LA STATE OF THE STA	VI ST INSPECT	10A 10A 10A 10A 10A 10A 10A 10A 10A 10A	00 m	LER SOU! SPI TEST DAT ME 160 MO MO MO MO MO MO MO MO MO M	PIPE	CASING POLICE POLICE SOLUTION SO	LAST C	ASING!	OTHE SHOE	TEST	7
MOURS	NTING THE OR JAR	RATIO	NS IN	ONDITH	ON HOLE	IRS (100) L C C C C C C C C C	IDO OS INCE LA STATE OF THE STA	VI ST INSPECT	THER TON	00 m	LER SOU! SPI TEST DAT ME 160 MO MO MO MO MO MO MO MO MO M	PIPE	CASING POLICE POLICE SOLUTION SO	LAST C	ASING!	OTHE SHOE	TEST	7
MOURS	NTING THE OR JAR	RATIO	NS IN	ONDITH	ON HOLE	E	MOSE LA	VI STINSPECT STATE PILOT	10A 10A 10A 10A 10A 10A 10A 10A 10A 10A	IOTS ISOP	TEST DAT	PIPE	CASING POLICE POLICE SOLUTION SO	LAST C	ASING!	OTHE SHOE	TEST	7
MOURS	NTING THE OR JAR	RATIO	NS IN	ONDITH	ON HOLE	E	IDO OS INCE LA STATE OF THE STA	VI STINSPECT STATE PILOT	10a 10a 10a 10a 10a 10a	IOTS ISOP	TEST DAT	PIPE	CASING POLICE POLICE SOLUTION SO	LAST C	ASING!	OTHE SHOE	TEST	7
MOURS	NTING THE OR JAR	RATIO	NS IN INC.	I SEC	ON HOLE ON HOLE OUENC COUENC Fra JI	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ACT LA	VI STINSPECT STATE PILOT	10A 10A 10A 10A 10A 10A 10A 10A 10A 10A	IOTS ISOP	TEST DAT	PIPE	CASING POLICE POLICE SOLUTION SO	LAST C	ASING!	OTHE SHOE	TEST	7
MOURS	NTING THE OR JAR	RATIO	NS IN	I SECONDITION OF THE PROPERTY	ON HOLE ON	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1720 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	VI STINSPECT STATE PILOT	10A 10A 10A 10A 10A 10A 10A 10A 10A 10A	IOTS ISOP	TEST DAT	PIPE	CASING POLICE POLICE SOLUTION SO	LAST C	ASING!	OTHE SHOE	TEST	7
MOURS	NTING THE OR JAR	RATIO	NS IN IN IN IN IN IN IN IN IN IN IN IN IN	1 SEC	DUENC CO	1000 STATE S	17000 17000	VI ST INSPECT SCLIFY. PILL TOWN 14	10A 10A 10A 10A 10A 10A 10A 10A 10A 10A	IOTS ISOP	TEST DAT	PIPE	CASING POLICE POLICE SOLUTION SO	LAST C	ASING!	OTHE SHOE	TEST	7
MOURS	NTING TO JAR	CK. BIP CK.	NS IN INC.	1 SEC 330	ON HOLE ON	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	17000 17000	VI ST INSPECT SCLIFY. PILL TOWN 14	10A 10A 10A 10A 10A 10A 10A 10A 10A 10A	IOTS ISOP	IES DAT	PIPE	CASING PCI C PCI	LAST C	ASING I	OTHE SCALE	TEST	7
MOURS.	DIR	RATIO	NS IN INC.	1 SEC 330	ON HOLE ON HOLE OUENC SCO Phy 3:: 3 2 3 2 7 EYS	1000 STATE S	ACE LA	VI ST INSPECT SCLIFY. PILL TOWN 14	10A 10A 10A 10A 10A 10A 10A 10A 10A 10A	IOTS ISOP	IES DAT	PIPE	CASING PCI C PCI	LAST C	ASING I	OTHE SHOE	TEST	7
MOURS.	DIR	RATIO	NS IN INC.	1 SEC 330	ON HOLE ON HOLE OUENC SCO Phy 3:: 3 2 3 2 7 EYS	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ACE LA	VI ST INSPECT SCLIFY. PILL TOWN 14	2 10a 10	IOTS ISOP	IES DAT	PIPE	CASING PCI C PCI	LAST C	N/ASING/	OTHE SCALE	TEST	7
MOURS.	DIR	RATIO	NS IN IN IN IN IN IN IN IN IN IN IN IN IN	1 SEC 330	ON HOLE ON HOLE OUENC SCO Phy 3:: 3 2 3 2 7 EYS		ACE LA	VI ST INSPECT SCLIFY. PILL TOWN 14	100 100 100 100 100 100 100 100 100 100	IOTS ISOP	TEST DATE OF THE STATE OF THE S	PIPE	CASING PCI C PCI	LAST C	INTA	OTHE SCALE	TEST	7
MOURS.	DIR	RATIO CK. 80 RATIO	NS IN IN IN IN IN IN IN IN IN IN IN IN IN	1 SEC 330	ON HOLE ON		ACE LA	VI ST INSPECT SCLIFY. PILL TOWN 14	10A 10A 10A 10A 10A 10A 10A 10A 10A 10A	IOTS ISOP	TEST DATE OF THE STORY OF THE S	PIPE	CASING PCI C PCI	LAST C	INTA	OTHE SCALE	TEST	7
MOURS.	DIR	RATIO	NS IN INC.	1 SEC 330	ON HOLE ON	IRS. SIP	ACE LA	VI ST INSPECT SCLIFY. PILL TOWN 14	10A 10A 10A 10A 10A 10A 10A 10A 10A 10A	IOTS ISOP	IEST DATE	PIPE	CASING PCI C PCI	LAST C	INTA	OTHE SCALE	TEST	DOC LEC
MOURS.	DIR	RATIO CK. 80 RATIO	NS IN INC.	1 SEC 330	ON HOLE ON	IRS. SIP	ACE LA	VI ST INSPECT SCLIFY. PILL TOWN 14	10A 10A 10A 10A 10A 10A 10A 10A 10A 10A	IOTS ISOP	TEST DATE OF THE STORY OF THE S	PIPE	CASING PCI C PCI	LAST C	INTA ASING	OTHE SCALE	TEST	DOC LEC
MOURS.	DIRE UNES C	CK. 80 CK	NS IN IN IN IN IN IN IN IN IN IN IN IN IN	1 SEC 30	ARPAIR CON HOLE ON H		100 000 100 100 100 100 100 100 100 100	V7	2 10a 10	IOTY IS OF	JGO SIN	DIPLE IN THE STATE OF THE STATE	Casing ont in the case of the	OTHER LAST C	N/ASING/	OTHE STATE OF THE	TEST TO THE CONTROL OF THE CONTROL	DOC LEC



•							•							
DAILY	DRILLI	NG R	EPORT							Text 5 A			AF	L NG.
10/07	15	114-6				200474	Juan			Tra	Cup	Mesa	5	L NC. -585-8 SINCE SPUD
NAME ON	UMBER	1140					ELEVA	104		co	NTRACTO	A-RIG HUMB	E R	
in Cap	Meso	L 5	-26			5097	k	511,			olema	,	I DAVE	INCL SPUD
TH	150013	SE 24 1	HAS FORM	ATION		-2	TOPERATI	D#		3/2	188	3/7/88	/	16
SUMM.	1540	CORE	PATIO	NI S	- 1 may	13744	- ripa				100	14/4/		
SUMM	2010													
Co	2017	2000		wice	3-	AND	171X	PI	سے	FR	EBN	6 AG	/حديم	
														
MUDI	NFORM	ATIO	N										Sec. 18 41	
MUD I	is.	WL	CCIPH	۲۱		11/	GELS. 6	11016	110	LIDS	I/AI	14000 2	60	•
7.5	18	10.8	LCM.		7	HT-HP-WL	F 0 / 3	11-	1 77	\$10	w Puse	RATES		
														9 8
HYDRA MP PRESS. 900	AULICS	AND	BIT										MP NO. 2	3PM
PRESS.	1	GPM	2 / 2 / 1	T NOZ.	VEL	247//	VEL.DPIDC	-1/2	P NG. 1	> 1	UR	"		
900	1 117/7		- 3 / 1 		WT UF	121777	SPM SPM	SOLIDS A	MOVAL	UNIT/TYP	,,,	T OF	WT UF	GPH -
105 HEMOVA	AL DAIL	""	W10-	- 1		1		Desil	Yer		1	1		
NO. SIZE	MAKE T	FPE SI	ERIAL NO.	- 17	15/32	DEPTH	DEPTH	OUT FE	Εĭ	HRS. RI	THE FT/HE	COMDIT	G AEM	ARKS
<u>- </u>				ķ	{ * }	* 				1			┸—┼─	· · · · · · · · · · · · · · · · · · ·
	T				1 1		1	i			1	1	1	
							_			+	+		$\neg \vdash$	
				Ì	1.1		j							
<u> </u>		₩T	OK BIT			ROTARY	TORQUE			USA	BLE BHA	WT. IN MUD		
					10	FF WEIGHT					ICK UP W	EIGHT		
TATING STREE	MG MEIGI	11			LACK U	AT WEIGHT								
DRUI	ING A	SSEM	BIY -	FRON	A BOT	TOM UP								
DRILL		LENG	TH 0.0		. COMP	ONENT		ENGTH	0.0.	1.0.	DMPORE	NT	LENGT	1 0.0. 1
Same		<u> </u>			<u> -</u>					h	•			
		í	1	1			t		1 1	ı L			1	1 1
					 7				L					
•		1	T	_1						<u>,</u>	,			
					i					. 1			1	1 1
		<u> </u>								<u> </u>	4		TOTAL .	HA
		ı	1	1	1,0		ſ		1 1	ı [,	5		1894	1. 33
TIME	DISTR	BUTI	ON - H	OUR										THAS HIRE ALL
HELING TRI	IP SI	AVEY	RIG REPAI	FICIRO	14						1		1	WASHIREAM
MENTING	ICE AOE	icon	DITION H	DLE	iLOG	- lo	THER	LOTHE	<u> </u>	OTHE	 	OTHER	OTHER	TOTAL
	DA. 502				-	- 1	10/e 24	العير		-		OTHER		124
RS. ON JARS	/S.S.			HAS.	SINCE LA	ST INSPECT	ION	BOP T	EST DAT	E.		LAST CASIN	GISHOE TE	si '' 13.5 jago
				1								778	2200	
URS OPER					/ (.		<i>Z Z</i>	/	10					
24	Cand	Tien.	no je	11:1	<u> ۱۲۶ ہے ہے</u>	c. Wer	11 1	2 PH	05.					
	177.2 31	-1 w	74 174	11,00	TIDE 1	1941	l pr		Time					
	i					3-17	28		3:00					
	1					3- 23			3:00			- (25		
	!					<u> </u>			3:00,			16.9 P.P.	7.	PO UIS.
	1					4-25	146		1.00,					
	 													
	l .													
	ŀ													
	1									-				
	!													
	<u> </u>													
														
														
												-		
														· · · · · · · · · · · · · · · · · · ·
			JRVEYS	5	TECTION		ITVD		jepo	RDINATES		įve	RT. SEC.	IDDG LEG
			JRVEYS	101	RECTION		TVD		1000	RDINATES	1	Į VI	RT. SEC.	IDOG LEG
	PTH AN		JRVEYS	101	RECTION					RDINATES		į vi	RT. SEC.	DOG LEG
DIRE EASURED DEF	PTH AN		JRVEYS		ECTION					RDINATES			RT. SEC.	
	PTH AN		JRVEYS	S IDIU	RECTION				1	RDINATES	1		RT. SEC.	
	PTH AN		JRVEY!	Dir	ECTION					RDINATES			RT. SEC.	



DAILY DRILLING REPORT FIELDIAREA Tin Cup Mega 3/17/88 SAN Juan
ELEVATION Utah WELL NAME & NUMBER Tin Cup Mesa 5-26 5097 Coleman #4 197 KE 5111 DAYS SINCE SPUE MOVE IN DATE SPUC DATE POOTAGE 24 HAS FORMATIO DEPTH 5456 3/2/88 3/3/88 STUCK PILE O Upper Zimay SUMMARY OF OPERATIONS 4 HOURS me KILL well. OSSENCE MIX SAR CINCULATE BOTTONS VI WITH NO FROW. INFLUX CONO 1770N CINCUMTE MUD INFORMATION 49.5 14 16,000 240 25/65 3 WEIGHT 15.4 79 12.0 48 10.0 72 SLOW PUMP MATES CORR. INNIB. -20 HYDRAULICS AND BIT HHULAR VEL.DPIDC PUMP PRESS 113 alter £121/67 51/2 800 SOLIDS REMOVAL UNITITYPE SOLIDS REMOVAL UNIT/TYPE Desander Desilter COMPITION DEPTH IN BIT NO. SIZE TEET INT ON BIT ROTARY TORQUE ADTATING STRING WEIGHT SLACK OFF WEIGHT PICK UP WEIGHT DRILLING ASSEMBLY - FROM BOTTOM UP LENGTH COMPONENT 4.0 0.0 1.0. COMPONENT Some TOTAL BHA TIME DISTRIBUTION - HOURS ING REPAIR 1 OTHER CA CO 10THER 16:11 100 614 124 1214 HRS. SINCE LAST INSPECTION BOP TEST DATE 95% @ 2250' 13.5,000 POURS OPERATIONS IN SEQUENCE Mix bor 1/2 4 1/2 1 Kill well thru choke 1 Mix bor I kill well thru chike Well dead. 1 Mix bor.

1 Circ. and condition hele.

13-point & check for flow. 71/4 Free - 7 2316 11. 1 65% free Partially stucks 2348 Great for flow. He flow. No lorses. Ounite this merning. Bookground gas 80 units when started circ. 3-23 3/16/28 1850 ps; 2:30PM 3414/88 3.23 2000, 825 103 1-25 946 11 4-25 4-25 950151 1500 cs; 250 /50 3/15/58 3-23 11:00 AM 700 PSI. 1-25 4-25 1000 نتص DIRECTIONAL SURVEYS IVERT. SEL. DIRECTION COORDINATES IDOC LEG TAKEN THE DAILT WELL COST 21739 CUM 312694 DAILY MUD 10860 CUM 81373 REPORT GIVEN PLAN

Rosential

GRWINIEIE



DAIL	Y DR	ILLING	REP	ORT			COUNTY/PARIS	S PI		16	IELDIAR	É A		AFI	HC.
3/16/80	8	141	Lah				San Jua	4	· ·		Tin 6	ا ور	Mesa		1 NC. 5-585-8
WELL HAME	NI	ER Toku	5-2	6		و	5097		5111		2	olem	an #4		
DEPTH	77	324100	A HRS	FORMAT	102	<u> </u>	PRESENT OF	ERATIO	Mr. a		MOVE I	DATE	3/1/UV	DAYS	WE SPUD
5456 SUM	HAN	OFO	PERA	TIONS	>	7	wear		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		10/2/	00	13/15/20	<u></u>	
															1
CIRC	NA	7 E ,	192	2 <u>C</u>	ONDI	7700	1 150.	- u	15761	77	on	0///	<u> </u>		BACKLAUN
6A5	INC	n OPS	عدد.	54	10	·	1 punes	·		PET	ECT 6	ک مو	CKHT	R	ou.
CHA	- /-	1 111	91		10	wie	E 106		ر ورد	3/00	1 5	27	OUT	or	311.
MUE	INFO	RMAT	ION	<u>^</u> 7/X	عبدح		10/3	75	000	5	05 155	AND K	HLORDESCALO	IUM SAL	PPW
19.2	50	غة ا	7,5	11	43		7 /0/3 GEL 37 /0 T-HP-WL	9/44	3	47	7	V4 .	16,800 20	2	
CDRR. INHIB.		PPMOIL	~	LCM	внТ	*	T-MP-WL				SLOW	SPM C	RATES		p esi
		ICS A	ND B	iT										P NO. 2	SPH 1
PUMP PRESS	••	1	M	2 JET N	OZ, VEL	^	HHULAR VEL.	1			- 1	SPM	1	_	1
SOLIDS REM				NT OF	wt	UF	GP≌	50	CIDS REM	OYAL U	417/TYPE	. "	1 04	WT UF	GPM 1
Desilter	MAKI	TYPE	SERIA	L NO.	UETS/3	12.	DEPTH IN	DEPTH C	DESGA-	1	HRS. RU	FT/HR	CONDITIO	MEM	ARES
					11							-	4'1-1		
					1 1	.1							111		
	十	 			1:								1 1		
RPM			WT ON	BIT			ADTARY TOR	DUE		1	USAS	E BHA	WT. IN MUD		
							WEIGHT				1.00	L UP W	FIGHT		
ROTATING S	I KING N	EIGNI			-	CA OFF	HEIONI								
		ASSE	MBL	Y - FR	OM B	OTTO	M UP	1.61	GTM () D	in ici	W POH E	.1	LENGTH	0.0. 1.0.
COMPONENT		1	1617	1 1				1			,,		``		
						_		1			1,2				, ,
2				<u> </u>		<u> </u>				<u>-</u> -	17				,
3						<u> </u>			l_		13				
4						<u></u>					1,4			TOTAL BE	
],		1		1 1				1	i	į	15			894	33
TIM	E DIS	TRIBU	TION	- HOL	JRS	iLOST	CIRCLEISHING	IRIG SE	RV. IW.C.	6. iL/i	DP 10	ASING	IWOC IN/	IN/D	WASH/REAM
		1	1	1		-	1	ļ	- 1	- 1	İ		1 1	1	1
CEMENTING	ISK.	BOE C	ONDITI	ON HOLE	100	-	OTHER 40-	Mix	OTHER A	12.	STATE OF	5/00	DTHER	OTHER	24
MRS. DN JA	RS/SS		7 -2	- m	RS. SINC	E LAST	INSPECTION	<u> </u>	BOP TES	DATE	1000	, , , ,	LAST CASING!	SHOE TES	
HOURS OPE	EDATI	ONS IN	SEC	DUENC	F	-			1						
150	I C	re. 4.	conc	مرع زمزار	hel	e Z	werking	مرزم	· e .				O Corio		
/	Ri	- up	Home	:o. /-	10/1 9	رده	<u>ing 140</u>	+ we	11 ju.	Fil.	P - W 17.	<u>ن موسی</u> : مدسم	0 <u>Corie</u>	<u>* - 5 -</u> 2 . ja.	copsi.
	m	's tran	to.	19.0	pa.		p. P.								
1/2	10	mp 17	00	رمس ب وه	مركف	gue gl	en jet	-	D.P. 1.	ressu	<u> </u>	0	<u> co sio ; -</u>	÷ 400	2000
4	M	z muc	1 70	19,0	109.										
<u> </u>	 			<u>_</u>					Rigi	n.	LLINS.				
	<u> </u>				·										
	+-						· · · · · ·		 						
		· · ·													
	二二														
															
	二二														
DIF		DNAL S	SURV	EYS	DIRECTI	ON	TVE	- '-		COORD	NATES		VERT	. SEC.	idoc les
										<u>.</u>		I			
-		1					!			<u>. </u>		1			1
-		<u> </u>		<u> </u>			<u> </u>			<u> </u>		1			
		·								·					

DAILY WELL COST 21821 CUN 290955 DAILY MUD 16 451 CUM 70513 REPORT GIVEN ROSE TAKEN THE GRW IVIDIES



GRW/VID/86

_		DRIL	109.96		DRT		COUNTY-PAR	15.5		FIELD ARE	<u> </u>		AFE	NG.
2/1	5/88	•	114	. 6			1 500 J	447		TIN CONTRACTON-RIG HUMBER				585-8
WELL !	NAME A	NUMBER		- 26	<		5097	ELEVATIO	5111 PIFE .	CONT	PACTOR	- # 4		\
DEPTH	Cup	11/29 FO	TACE ?	T HRE	FORMATI	ON IG	PRESENT	PERATION	- 4-	MOVE IN	DATE	PUD DATE	DAYS SI	3042 35
54	56		0		Upper	Ismay	5700	<u> </u>	PIFE	13/2/	188	3/3/88	1 /-	5
	SUMA	ARY	<u> </u>	PEHA	HUNS						-			
w.	ALM	7	10	7	0 /	E. 8 PM	· An	o K	EVENTE	QL.	0,	oe n	Jan.	
						76 0	-20		a ATT	da.	, (0000	مر لدد	200
							= 	CIAC	DUMME					
w	onk		570	ck	- p,	ME.								
WEIGH		INFOF		501	PH	IPV IV	r) IGE	L\$. 0/1	01FE N. 8 O	LIDS NEA	HD KH	LONDESCALCI	UM SALT	PPM
19.	0	3/	11	:5	40	36	40 1	7/40	3 40	2 11/2	4 1,	1,500 20		
COAR.	-	PI	MOIL .	•	LCM.	BHY	(Т-нР-₩↓	ŀ			20MP RA	ATES .	pr	4
L	HYDE	AULIC	S AP	ID BI	Ť	!		F						
PUMP	PRESS.	1,	, GP	M	2 JET NO	Z. VEL.	IO 2/10	DP/DC	FUMP NO. 1	1 4	PM	PUMP	NO. 3	\$PM
17	00		2		3/-	4	100418-	4	1/51 24 10000	1 20	9 W1	 	T UF	GPM
Des	Her	- 0	PF	"			_1		WT FEET 451			1 .		<u> </u>
17 20	SIZE	ATT	TYPE	SERIAL	. NO.	JET\$/32"	COOS	DEPTH D	UT FEET	XK. RUN	FTIHR	CONDITION	S REMAP	18.5
178	W/C	236		100	رما	10 111 4	1003	 	173,	1222	/ /	 	 	
											<u> </u>	4_4_4		
,						, ,						1 1 1		•
RPM	<u> </u>	1	1	WT ON	BIT	11	ROTARY TOR	OUE				. IN MUD		
		_			_	10				,	6 /	GHT		
ROTAT		ING WEI	GKT			SLACK OF	/4/			1		143	* *	
<u> </u>	DRIL	LING	ASSE	MBLY	- FRO	M BOTTO	DM UP							
COMPO	DHENT	_	LEN	GTH	0.D. I	I.D. COMPO	HENT	LEN	GTH 0.0.	1.D. CO	PONENT	1	LENGTH	0.0.
-			٠			16								<u> </u>
2			1			,		1		<u></u>				<u> </u>
	-				1			1	1 1	١,		ł		1 !
2					1					- 13				· •
			<u> </u>	1						14			OTAL BHA	
_			1	ļ	1	١,,		1	1 1	15			894.	
	TIME	DIST	RIBUT	ION	- нои	RS				10 be 107	EINC	TWOC THIL	IN/D	WASH/REAM
DRILL	ING TR	IF	SURVEY	FRIG H	EPAIR CI	ac. ILLES	j	- 1	RV. W.O.O. L	1				
CEME	NTING	CK. BC	1		HOLE	Loc	IOTHE!	Civer	OTHER WILL 51/2	OTHER	٥	THEK	THER	24
1	ON JARS	/5.5		6	IKR.	S. SINCE LAST	INSPECTION	- 124	BOP TEST DATE		- !	AST CASING/S	HOE TEST	
						182			3/4/88	?		988 @ 2	250	13.5 ppg
HOURS	OPER	OITA	NS IN	SEO	UENCE		/							
1	?	we.	rah f	: حرب	with	bon to	18.8 pp	9 3	575 574	CF = 4.2	5-	····		
-		Kill	w+1/		<u> </u>	- V = //	570P		00 -71	20 101	2	@ 142	40-	
	/h	1	14					c	Ye. pressu	110 60	000	· en Fil	-1 500	<u> </u>
74					1 Den	ell !	SICP	<u> </u>	12 pp - (00				
3		Mix	ue	5/9	me	drust.	en							1111 1
		Kill	رم س	11. 1	Cotuc	09 1P	8 000	Oppi	Deen 5	be	7:0	o Tlew	To w	-110000.
6		1		-ecd	Leen	mud.	rige #		mare pro					
				•					/\	. *		-R-C 11-	MOE.	
<u> </u>		1.	·	72 M	cestia	rmed O.K	to the	100	lisposal p					
		1 ,												
-		17			07701				OIL	w7		401		
 		بور بر ا	e and		3. 10	3/15/6								
				4-	25	المدين	~ 10	060	3	254.	BWA	O KAI	€.	· · · · · · · · · · · · · · · · · · ·
-		 		3-2	25	0 ?	540,- 10	75						
										- 				
	D10-	CTIO	VA L	Fra		romi	E577	7110		3360				
MEAS		CTIO		UKV:		IRECTION	ĮŦV	5	ICOOR	DINATES		(VERT.	SEC.	DOG LEG
1							1							
-														
-					i									
					1									
									i	i	•	<u>-</u> !		
		تـ تــ ٥٥٢:	359	9	_ CUM	49134	DAILY MU	234	60 cum 2	5403=	2 RE	PORT GIVEN	2 014	TAKEN THE
DAILY												Ь	ansen	

2,000 rocks



5-585-E DAILY DRILLING REPORT HLE AREA COUNTY/FARISE 3/14/88 Utah San Juan Tin Cup Mesa ONTRACTOR-RIG HUMBER WELL NAME & NUMBER Coleman #4 Tin Cup Mesa 5-26
SEPTH FOOTAGE 24 HAS FORMATION PRESENT OPERATION NOVE IN CATE SPUE DATE 3/2/PP 3/3/PP DAYS SINCE SPUD 12 5456 Upper Ismay 115 WELL CONTROL SUMMARY OF OPERATIONS 2600 SIDA 5456 . SHUT IN WITH WELL FLOW Drices To TO 18.7 MM. norsing ma 2650 SICP. MUD INFORMATION SAND CHLORIDESCALCIUM SALT 7/2/19 17.4 18.0 10.5 24 32 14 6500 20 111 SLOW SUMP MATES 700 PPHIOIL S 202 نوو HYDRAULICS AND BIT 2 JET HOZ. VEL ANNULAR VEL.DPIDG 225 131/240 1800 425 SOLIDS REMOVAL UNIT/TYPE COMPITION THE TOTAL PRIZE MAKE TYPE SERIAL NO. 5 78 47C 270 PB123 JETS/32 DEPTH IN 10 11 1 5005 451 35名 12.7 WT ON BIT ROTARY TORQUE USABLE BHA WT. IN MUD 45 14-1/2 55 61,000 PICK UP WEIGHT ROTATING STRING WEIGH 143,000 141,000 141,000 DRILLING ASSEMBLY - FROM BOTTOM UP COMPONENT LENGTH COMPONENT LENGTH 0.5 LENGTH 1 TOTAL SHA 1 294.73 TIME DISTRIBUTION - HOURS LID DP WASH/REAM 9/2 LOST CIRCLEISHING TRIC SERV. IN.C.O. 24 OTHER CONTROL DTHER OTHER CONDITION HOLE HRS. SINCE LAST INSPECTION BOP TEST DATE LAST CASING/SHOE TEST 95/g @ 2250 بعرور 5.51 36/88 182 HOURS OPERATIONS IN SEQUENCE Drill 1 Rie Jerv. Check BOP & Flaners 1/2 1041/1 Shut well in stabeliar pressure well kink 10 bbl enix 2";" stread Well kick 10 bbl. 10 bbl. 97in @ 5:15 1.M. 2550 I shot in cosine 1 shot is 0, P.1 2600 @ 7:15 F.M Giring 2650 Mix ber Whiten kar Bit bor. Orap 50ps; since shot in injection wells. 2550 Casing 2400 @ Porsont the workers dense € 5:00 → 6:00 1.M. About to 15 Thate 35 Linestra- 50 Flowback @ 10.00-711:00 Externed 40 Rich 490450 Gon. 70 Kick deppine when Hist Histon Huid! DIRECTIONAL SURVEYS YERT, SEC. DOG LEG COORDINATES IDIRECTION

DAILY WELL COST 25,720 CUN 235 535 DAILY MUD 20881 CUN 30572 REPORT GIVEN MAL TAKEN THE



	DRIL	LING	REPO	TRC			COURTYINA	154		FIELD.AR	Ł A			IAFE NO	
2/12/8	0	1111	44				SAN	JUA	n)	TIN CON CON STATE	حرب	M E5	. #	5-5	37-8
DII DI O O						i i	 	ELEVATION		CON	TRACTOM-	RIG NUM	iper sa	4	
TIN C	UP.	ME	54	5-2	6_	g:		KE		10	04-	772	- IDA	YS SINCE	3U42
DEPTH	FOC	TAGE 2	HRS	FORMATI	ON	TIM	PRESENT	PERATION		2/2	150 -	2/2/2	حر	//	İ
5341	2	-76		HONOR	Xer-	, and	7/	<u>υ</u>		_24		7/-/5			
SUMA	AARY			TIONS											
		1	nx	13	4	To	534	7							
										,					1
															1
	INFOF	1/471	ON												
MUD	VIS.	WL	22	PH	PV	Y		LSy 0/10	FC NO	DLIDS NE	AND CH	DESC	ALCIUM !	BALT	PPM
9.97	VIS. 38	10	•	10	10		11 6	/20	3 9	17	4 17	500 0	500		
DAR, INHIB.	P	MOIL S	•	LCM	внт		I-MP-WL	ŀ	3.	310	SPH AA	168 3	60	P*	İ
		ببلي		<u> </u>	ــــــــــــــــــــــــــــــــــــــ						378 0		<u>*</u>	P.F.,	
HYDI	RAULIC	S AN	A DI	2 JET NE	DZ. VEL	, ja	HHULAS VEL	DP/DC	FUYF NG. 1		5 P M	T .	UMP NO.	1	3PH
1800	Z	25		142	-5		31/240		5/2,	2 2	96	<u> </u>	WT U		GPN
SOLIDE REHO	VAL UNIT		-	VT OF	WI	UF	GPM	1500	LIDS REMOVAL	UNIT/TYPE	w T	OF I	WIU		U- W
					115.55		15555-15	TOERTH O	דע דע דע	HAL AUS	KIFTINA	COND	ITION I	REMARKS	
5 7%	HAKE	ريونونر	DO	17.3	1-1	 	5005	DEFIN DI	336		129	1	10		
5 72	170	220	101		101	<u> </u>	3000	+	+			T			
	1				1	1	<u> </u>	1				$\bot \bot$			
					1								, 1		
	<u> </u>		1				100000000000000000000000000000000000000	1			LE BHA WT	I HUD	لصل		
RPM		T	WT ON				ADTARY TOR	MUE							
SS ROTATING STI	ING WE	GHT	?	45	ISL4	CK DFF	WEIGHT			PIC	C//S .				
	10/2						14017				14	21	<u> </u>		
DRIL	LING	ASSE	MBLY	Y - FR	OM B	OTTO	M UP							GTA (.a.ı .a.o
COMPONENT		LEN	GTH .	0.0.	1.5.	COMPON	TENT	LEN	GTH 0.5.		MPONENT		 	1	I
· SAM	<u> </u>					•				111			'		
		•	t		·	_		1	1	,			!	1_	
2						7									,
		ı	1							13					
										. 1			1	1	1
4				$oldsymbol{ol}}}}}}}}}}}}}}}}}}$		9				114			TOTA	BHA	
		1	ı	, ,	1			1	1	١ ,,				943	7
5 T1845	DIST	RIBIIT	TION	<u>- нои</u>		10									
DRILLING T		SURVEY	PRIS F	REPAIR C	IRC.	LOST	ORC FISHING	S RIG SE	RY. W.D.D.	[/D DP	LASING	WOC	H/U H	I/D WAS	H/REAM
23/2								1/2	DTHER	DTHER		THER	JOTHE	! T	TOTAL
CEMENTING	CK. BO	DE C	TTIONC	DK HOLE	LO	ü	OTHE	n	DIREA	CIMEN	1		1		24
MAS, ON JAR	5/55			IH#	S. SINI	E LAST	INSPECTION		BOP TEST DAT	<u>. </u>		45° CASI	HG/SHOE	TEST	
mna. UK JAK				(172	1/2	THEPECTION		3/6/d	-1		9 1/0	e22	50 /	13.5 PPC.
HOURS OPE	RATIO	NS IN	SEC	UENC	E										
2	1 4	2													
1/2		· · · · · · · · · · · · · · · · · · ·		Servi	سے		MAGE	<u> </u>	1. 10	10100					
21:2	+!	ø													
<u> </u>	+														
	+														
					10 D		wT	70		PPC		WE	70		
				CH	TOR	10€.	<i>يدر</i> ي	CREA	Ento						
															
	+				417	74									
 	1														
	1						54.		10 10				<u> </u>		
							<u> </u>		90 Ta						
	-							2-	7 001	-					
	+					<u>25م _</u> مد م	 	<u> </u>	<u> </u>						
	┪														
	1														
	1														
		NAL 5	SIID!	EVE											
MEASURED D	ECTIO	NAL S	SURV	ETS	DIRECT	ID4	171	VE.	1000	RDINATES		- 14	ERT. SEC	,.	DOG LEC
	1			<u>:</u>							1				1
	i			i			ı		1						1
															1
	1								· · · · · · · · ·		.	<u>-</u>			1
							,								
	+										:				!
	!	49							3 5111						





ATE 8/12/81 ELL NAME AN		LING					COUNTYIPAR	15×		FIELD. ARE	^			AFE NO	
3//2/81		STATE		2			SAN	JUAN	/	TIN	CUP	100	4	5-5	85.8
EL PENE LA	UMBER	07	17/1				,, -	ELEVATION		CON	RACTOR-	RIG NUM		/	
770/ CL	//	~ ~	-	<- 2	24	L.		1		10	DATE	مرجعرة	7		
TIN CO	ळेग	TAGE	A HRE	FORMATI	ION	<u>IG.</u>	PRESENT	PERATION		MOVE IN	DATE &	PUD DATE	ь	AYE SINCE	3042
		60		House,	ta	TRA	디	d .		3/2/	PP 3	/3/8	8	10	
5045 SUMM	APV	OF 05						Σ							
SUMM	An I														
		TH	-10	100	6		817	45	5000	5					
		7.0	, ,												
MUDI	NEOR	MATI	ON												
	15.	WL	CCI	PH	PY	Y	P GE	LS. 0/10 F	1 100		HD CH			SALT	••
03	44	1/2	8	10.0	8HY	2	13 7	/23	3 111	1/	4 6	100	10	<u> </u>	
AR, INNIB.		MOIL N		LCM	เ ล้หรั		11-HP-WL	1.	33	SLOW	PUMP RA	TES 4	100		
		1	- 1	ĺ		- 1					SPM			99	
HYDR	ATILIC	SAN	D BI	+											
MP PRESS.	11	GPN	1	2 JET H	OZ. VE	L. /	MHULAS VEL		PUMP HO. 1		S P M	•	UMP NO	. 2	1 574
1800	12	251		42	5	- 1.	131/24	6 5	2, p		96	J	₩Ť 1		<u> </u>
LIDS REMOV			w	T 04	W	T UF	GPM	SOLID	S REMOVAL	NIT/TYPE	wī	OF .	wti	JF	GPW
DESILT	222		10.	.2	1	13.1	1 300				<u> </u>	11			
*D.ISIZE	MARE	TYPE	SERIAL	L NO.	JETS	13.1	DEPTH IN	DEPTH DUT	FEET	HRS. RUN		CONDI	TION	REMARKS	
1 7/4	SEC	25-	367	7082	11	11/1×	14172	5305	1832	50_	16.6	1717	II		
177		-	7		+			-			,	1		i	
- h/6	47c-	التمغيزا	PBI	123	10	11 X	5005		40	2/2	160				
					1-		 	i	T -	Ī	T			i	
·					1				4	1 .				<u> </u>	
H		<u></u>	NT ON		—		ROTARY, TOR	OUE	<u> </u>	USABL	BHA WT	. IN MUD			
60/5	3	1	50		5		1/4]	6/M	7 -			
TATING STRE	HG WEI	GHT !		/ 		ACK OF	WEIGHT			PIC					
107							1077				107	14		1	
Delli	INC	ASSE	MBIY	- FR	ОМ	BOTTO									
MPONENT	-1110	LEN	GTH	0.0.	1.0.	COMPO	HENT	LENGT	н о.в.	I.D. CO	MPONENT		LE	HGTH .	0.0. 1.0
Stare		1	t	· 1		i.		.	1 1	١,,			l		<u> </u>
						1									
		!	- 1	1				ļ	1 1	nz.					
						1		1							
•			- 1	1		١.		1	1 1	h3					
						"									
						١.		١.	1 1	14				1	
		<u> </u>				.				14				AL BHA	
•		<u> </u>				ļ		1		15		<u> </u>		AL BHA 294.3	<u> </u>
TIME	DIST		ION	- HOL	JRS	10							10	94.3	
	DIST	SURYEY	IRGG A	- HOL	JRS		T CIRC FISHING	G TRIC SERV.			ASING	woc	10	94.3	SHIREAN
	DIST	SURYEY	IRGG A	HOL	JRS		CORC FISHING	G RIC SERV.		75 DP C			<u> d</u>	H/D WA	SHIREAM
TIME RILLING TRI 18 5	P	URYEY 2	ALC A	- HOL	IRC.		T CIRC FISHING	1/2				WOC THER	10	H/D WA	SHIREAM
IP 5	P	URYEY 2	ALC A	REPAIR C	IRC.	icos.		5 01	HER	OTHER	10	THER	N/U OTH	94.3	
ILLING TAI	ICK. BC	URYEY 2	ALC A	OH HOLE	RS. SIP	LOS		R 01	HER	OTHER	0	THER	H/U OTF	HID WA	TOTAL 29
ILLING TAI	ICK. BC	URYEY 2	ALC A	OH HOLE	RS. SIP	LOS	OTHE	R 01	HER	OTHER	0	THER	H/U OTF	HID WA	SHIREAM
MENTING	ICK. BC	DE CO	PRICE R	ON HOLE	RS. SIP	.os	OTHE	R 01	HER	OTHER	0	THER	H/U OTF	HID WA	TOTAL 29
MENTING AS. ON JARS	ICK. BO	DE CO	PRICE R	ON HOLE	RS. SIP	LOS	OTHE	R 01	HER	OTHER	0	THER	H/U OTF	HID WA	TOTAL 29
MENTING RS. ON JARS URS OPER	ICK. BO	NS IN	SEO	ON HOLE	RS. SIP	00 NCE LAS	OTHE	R 01	THER OF TEST DATE 3/6/6	OTHER	10	THER	H/U OTF	HID WA	TOTAL 29
MENTING AS. ON JARS URS OPER	ICK. BO	NS IN	SEO	DH HOLE	RS. SIP	00 NCE LAS	OTHE	R 01	THER OF TEST DATE 3/6/6	OTHER	10	THER	H/U OTF	HID WA	TOTAL 29
MENTING AS. ON JARS OPER 3 1/2 10/14	ICK. BO	NS IN	SEO	ON HOLE	RS. SIV	NCE LAST	OTHE TIMSPECTION	R 01	P TEST DATE B/6/E	OTHER		THER	NIU OTH	P94.3	TOTAL 24
MENTING AS. ON JARS URS OPER 2 177 10 1/4	ICK. BC	NS IN	SEO	ON HOLE	RS. SIV	NCE LAST	OTHE TIMSPECTION	R 01	P TEST DATE B/6/E	OTHER		THER	NIU OTH	P94.3	TOTAL 24
MENTING RS. ON JARS URS OPER 2 172 1014 172	ICK. BC	NS IN	SEO	ON HOLE	RS. SIV	NCE LAST	OTHE TIMSPECTION	R 01	P TEST DATE B/6/E	OTHER		THER	NIU OTH	P94.3	TOTAL 24
MENTING S. ON JARS URS OPER 3 10 11 11 11 11 11 11 11 11	ICK. BC	NS IN	SEO	ON HOLE	RS. SIV	NCE LAST	OTHE	R 01	P TEST DATE B/6/E	OTHER		THER	NIU OTH	P94.3	TOTAL 24
MENTING AS. ON JARS URS OPER 3 172 1014 172	ICK. BC	NS IN	SEO	ON HOLE	RS. SIV	NCE LAST	OTHE TIMSPECTION	R 01	P TEST DATE B/6/E	OTHER		THER	NIU OTH	P94.3	TOTAL 24
MENTING RS. ON JARS URS OPER 2 172 1014 172 2 172	ICK. BC	NS IN	SEO	ON HOLE	RS. SIV	NCE LAST	OTHE TIMSPECTION	R 01	P TEST DATE B/6/E	OTHER		THER	NIU OTH	P94.3	TOTAL 24
MENTING AS. ON JARS URS OPER 3 10 10 10 10 10 10 10 10 10 10 10 10 10		NS IN	SEO	ON HOLE	RS. SIV	NCE LAST	OTHE SO	1/2 R 101 RC RC RC RC RC RC RC RC	OP TEST DATE AND OP TEST DATE OP TEST DATE OP TEST DATE OP TEST DATE OP TEST DATE	OTHER OTHER	10	THER AST CASH	NOTE 22	P94.3	SHIPEAN TOTAL 2 4
MENTING RS. ON JARS URS OPER 2 172 1014 172 2 172		NS IN	SEO	ON HOLE	RS. SIV	NCE LAST	OTHE SO	1/2 R 101 RC RC RC RC RC RC RC RC	OP TEST DATE AND OP TEST DATE OP TEST DATE OP TEST DATE OP TEST DATE OP TEST DATE	OTHER OTHER	10	THER AST CASH	NOTE 22	P94.3	SHIPEAN TOTAL 2 4
MENTING RS. ON JARS URS OPER 3 10 11 10 11 21 21 21 21 21 21		NS IN	SEO	ON HOLE	RS. SIV	NCE LAST	OTHE SO	1/2 01 01 01 01 01 01 01 0	POPE TEST DATE BLUE BO	DOTHER DOTTE	J. J. J. J. J. J. J. J. J. J. J. J. J. J	INO	OTH OTH 22	N/D WA	SHIPEAN TOTAL 2 4 BSPR
MENTING TAIL MENTING RS. ON JARS URS OPER 172 1014 172 2172 2172		NS IN	SEO	ON HOLE	RS. SIV	NCE LAST	OTHE SO	1/2 01 01 01 01 01 01 01 0	Properties Days	DOTHER DOTTE	J. J. J. J. J. J. J. J. J. J. J. J. J. J	INO	OTH OTH 22	N/D WA	SHIPEAN TOTAL 2 4 BSPR
MENTING TAIL MENTING AS. ON JARS URS OPER 1014 172 2124		NS IN	SEO	ON HOLE	RS. SIV	NCE LAST	OTHE SO	1/2 R 101 RC RC RC RC RC RC RC RC	Properties Days	DOTHER DOTTE	J. J. J. J. J. J. J. J. J. J. J. J. J. J	INO	OTH OTH 22	N/D WA	SHIPEAN TOTAL 2 4 BSPR
MENTING TAIL MENTING RS. ON JARS URS OPER 172 1014 172 2172 2172		NS IN	SEO	ON HOLE	RS. SIV	NCE LAST	OTHE SO	1/2 01 01 01 01 01 01 01 0	Properties Days	DOTHER DOTTE	J. J. J. J. J. J. J. J. J. J. J. J. J. J	INO	OTH OTH 22	N/D WA	SHIPEAN TOTAL 2 4 BSPR
MENTING TAIL MENTING RS. ON JARS URS OPER 172 1014 172 2172 2172		NS IN	SEO	ON HOLE	RS. SIV	NCE LAST	OTHE SO	1/2 01 01 01 01 01 01 01 0	Properties Days	DOTHER DOTTE	J. J. J. J. J. J. J. J. J. J. J. J. J. J	INO	OTH OTH 22	N/D WA	SHIPEAN TOTAL 2 4 BSPR
MENTING TAIL MENTING RS. ON JARS URS OPER 172 1014 172 2172 2172		NS IN	SEO	ON HOLE	RS. SIV	NCE LAST	OTHE SO	1/2 01 01 01 01 01 01 01 0	Properties Days	DOTHER DOTTE	Jan San San San San San San San San San S	INO	OTH OTH 22	N/D WA	SHIPEAN TOTAL 2 4 BSPR
MENTING TAIL MENTING RS. ON JARS URS OPER 172 1014 172 2172 2172		NS IN	SEO	ON HOLE	RS. SIV	NCE LAST	OTHE SO	1/2 01 01 01 01 01 01 01 0	Properties Days	DOTHER DOTTE	Jan San San San San San San San San San S	INO	OTH OTH 22	N/D WA	SHIPEAN TOTAL 2 4 BSPR
MENTING TAIL MENTING RS. ON JARS URS OPER 172 1014 172 2172 2172		NS IN	SEO	ON HOLE	RS. SIV	NCE LAST	OTHE SO	1/2 01 01 01 01 01 01 01 0	Properties Days	DOTHER DOTTE	Jan San San San San San San San San San S	INO	OTH OTH 22	N/D WA	SHIPEAN TOTAL 2 4 BSPR
MENTING TAIL MENTING RS. ON JARS URS OPER 172 1014 172 2172 2172		NS IN	SEO	ON HOLE	RS. SIV	NCE LAST	OTHE SO	1/2 01 01 01 01 01 01 01 0	Properties Days	DOTHER DOTTE	Jan San San San San San San San San San S	INO	OTH OTH 22	N/D WA	SHIPEAN TOTAL 2 4 BSPR
MENTING TAIL MENTING RS. ON JARS URS OPER 172 1014 172 2172 2172		NS IN	SEO	ON HOLE	RS. SIV	NCE LAST	OTHE SO	1/2 01 01 01 01 01 01 01 0	Properties Days	DOTHER DOTTE	Jan San San San San San San San San San S	INO	OTH OTH 22	N/D WA	SHIPEAN TOTAL 2 4 BSPR
MENTING TAIL MENTING RS. ON JARS URS OPER 172 1014 172 2172 2172		NS IN	SEO	ON HOLE	RS. SIV	NCE LAST	OTHE SO	1/2 01 01 01 01 01 01 01 0	Properties Days	DOTHER DOTTE	Jan San San San San San San San San San S	INO	OTH OTH 22	N/D WA	SHIPEAN TOTAL 2 4 BSPR
MENTING AS. ON JARS URS OPER 3 10/4 1/2 2/72		NS IN	SEO	DIENCE SETT	RS. SIV	NCE LAST	OTHE SO	1/2 01 01 01 01 01 01 01 0	Properties Days	DOTHER DOTTE	Jan San San San San San San San San San S	INO	OTH OTH 22	N/D WA	SHIPEAN TOTAL 2 4 BSPR
MENTING RS. ON JARS URS OPER 3 1/2 1/2 2/1/2 DIRE		NAL S	SEO	DN HOLE ON	RRS. SIP	VCE LAS'	OTHE INSPECTION	1/2 01 01 01 01 01 01 01 0	FINER OP TEST DATE BILLIAN FINES	DOTHER DOTTE	Jan San San San San San San San San San S	THER ASS CASIN	OTH OTH 22	P94.3	SHIPEAN TOTAL 2 4 BSPR
DIRE		NAL S	SEO	DN HOLE ON	RS. SIV	VCE LAS'	OTHE INSPECTION	PE Tong To	FINER OP TEST DATE BILLIAN FINES	DOTHER DOTHER P DOTHER P TEO TEO TO BOLL	Jan San San San San San San San San San S	THER ASS CASIN	OTHOUSE 222	P94.3	SHIPEAN TOTAL 2 4 BSPR
MENTING RS. ON JARS URS OPER 3 1/2 1/2 2/1/2 DIRE		NAL S	SEO	DN HOLE ON	RRS. SIP	VCE LAS'	OTHE INSPECTION	PE Tong To	FINER OP TEST DATE BILLIAN FINES	DOTHER DOTHER P DOTHER P TEO TEO TO BOLL	Jan San San San San San San San San San S	THER ASS CASIN	OTHOUSE 222	P94.3	SHIPEAN TOTAL 2 9 G.S.P.R.
DIRE		NAL S	SEO	DN HOLE ON	RRS. SIP	VCE LAS'	OTHE INSPECTION	PE Tong To	PORTEST DATE OF TEST DATE OF	DOTHER DOTHER P DOTHER P TEO TEO TO BOLL	Jan San San San San San San San San San S	INDO ON IV	OTHOUSE 222	P94.3	IDOG LEG
DIRE		NAL S	SEO	DN HOLE ON	RRS. SIP	VCE LAS'	OTHE INSPECTION	PE Tong Tong Tong Tong Tong Tong Tong Tong Tong	FOR TEST DATE FOR TE	DINATES	10 mg	THER ASS CASH	OTHOUSE 222	P94.3	IDOC LEC
DIRE		NAL S	SEO	DN HOLE ON	RRS. SIP	VCE LAS'	OTHE INSPECTION	PE Tong Tong Tong Tong Tong Tong Tong Tong Tong	PORTEST DATE OF TEST DATE OF	DINATES	Jan San San San San San San San San San S	THER ASS CASH	OTHOUSE 222	P94.3	SHAEAN TOTAL 2 9 G.S.P.R. TIDOC LEG
DIRE		NAL S	SEO	DN HOLE ON	RRS. SIP	VCE LAS'	OTHE INSPECTION	PE Tong Tong Tong Tong Tong Tong Tong Tong Tong	FOR TEST DATE FOR TE	DINATES	10 mg	THER ASS CASH	OTHOUSE 222	P94.3	SHAEAN TOTAL 2 9 G.S.P.R. TIDOC LEG
DIRE LASURED DE LASURE		NAL S	SEO	EYS	E DIREC	ILOS	OTHE INSPECTION	PE TONG	FOR TEST DATE FOR TE	DINATES	10 miles	THER ASS CASIN	OTHOUSE STORES	PHYSICAL STREET	IDOG LEG

MARATHON OIL COMPANY

Tin Cup Mesa #5-26 (Redrill)

AFE #5-585-8

Drilling Operations Plan
1375' FNL, 1635' FEL
Sec. 26, T38N, R25W
San Juan County, Utah
Elevation: 5111 KB
5097' GL

June 8, 1988

Geologic name of surface:

Jurrasic Morrison Formation

2. Estimated tops of important geologic markers:

Formation	Depth (K.B.)	Depth (From Sea Level)
Chinle	1576'	+3535'
Shinarump	2376'	+2735'
Moenkopi	2431'	+2680'
Cutler	2496'	+2615'
Honaker Trail Paradox Upper Ismay Hovenweep Lower Ismay Gothic	4336' 5276' 5430' 5591' 5623' 5676'	+ 775' - 165' - 319' - 480' - 512' - 565'
Desert Creek	5691'	- 580'
Chimney Rock	5771'	- 660'
TD	5781'	- 670'
Akah	5791'	- 680'

3. Estimated depths of anticipated water, oil, gas or other mineral bearing formations:

Formation	Depth (K.B.)	Possible Content
Upper Ismay	5430	Gas-Saltwater
Desert Creek	5691'	0il-Gas

4. Sample, logging, testing, and coring program:

MSFL-DIL-SP-GR-Cal from TD to surface casing with GR to surface.

FDC-CNL-GR-Cal from TD to surface casing.

FMS Log from TD to 5420'.

DST's are anticipated in the Desert Creek.

Mud loggers on location from 5200'-TD.

Samples will be caught, bagged, and dried in 30' intervals from 4300' to 5200' and then in 10' intervals to TD or as specified by the Company Representative.

5. Pressures and temperatures:

Maximum anticipated bottom hole pressure: Upper Ismay 5500 psi OVERPRESSURED.

See Exhibit E for well history.

Maximum anticipated bottom hole temperature: 136°F.

6a. Casing program:

Note: The 5" liner will include approximately 400' of overlap in the 7" casing placing the top of the liner at 5000'.

Min. Hole Size	Casing O.D.	Grade	Weight	Setting Depth	New or Used	Conn.
22" 12 1/4" 8 3/4" 6 1/8"	16" 9 5/8" 7" 5"	X-42 N-80 N-80 N-80	42.0# 40.0# 26.0# 15.0#	96' 2,250' 5,400' 5,791'	In Place In Place New New	8rd LT&C FL4S

6b. Cementing program:

7" Intermediate Casing

Casing equipment will include a float shoe, a float collar, centralizers, and scratchers. Centralizers will be run on the first 6 joints of casing and then spaced every third joint to the surface casing shoe. Cable-type scratchers will be run every 15' on the first 6 joints of casing.

Casing will be lowered into the hole slowly enough to avoid excessive surge pressures. Mud volumes/flows will be monitored throughout the job. Hole conditions permitting, the mud will be conditioned to optimum rheology and weight prior to cementing. The casing will be reciprocated during circulation and placement of the cement if hole conditions permit.

All cement volumes will be determined from the caliper log. Excess cement will be determined from present hole conditions. Excess cement will be a minimum 25% of caliper log volumes.

Preceding the cement, ten barrels of weighted mud flush will be used.

Cement Slurry:

Lead Slurry: (4800' - surface)

Type: Light-Weight w/2% CaCl², ½#sk Floseal

Cement Height: Surface
Slurry Weight: 13.1 ppg
Yield: 1.69 ft³/sx

Min. Cement Required: 494 sacks (25% excess openhole)

Tin Cup Mesa #5-26 .Page 3

Tail Slurry: (5400' - 4800')

Type:

Class 'B' w/.6% FLA

Slurry Weight:

15.6

Yield:

 $1.18 \, \text{ft}^3/\text{sx}$

Min. Cement Required: 103 sacks (25% excess plus shoe joint)

<u>5" Liner</u>

Liner Equipment will include a float shoe, a landing collar with a latch-down plug, a liner hanger-packer, a tie-back sleeve, bow-type centralizers, and solid-body turbulating centralizers. Approximately 400' of the 5" liner will overlap the 7" casing.

The liner will be lowered into the hole slowly enough to avoid excessive surge and swab pressures. Mud/flow volumes will be monitored throughout the job. Any hole problems will be resolved prior to attempting to run the liner. If high torque persist, it will be necessary to use a hydraulic set casing hanger. Hole conditions permitting, drilling mud will be conditioned to optimum cement rheology and weight prior to pulling out of the hole to run the liner. The liner will be reciprocated or rotated or both if hole conditions permit. If there is substantial hole drag while running the liner, no attempt to reciprocate will be made. A cement batch mixer will be used to ensure uniform quality slurry. Final cement recipes will be confirmed by pilot tests on the actual water, chemicals, and cement to be used on the well. Cement density will be increased as required for well control.

The liner will be cemented with 25 sxs. of light scavenger slurry followed by 47 sacks of class 'G' cement and additives.

The actual volume will be confirmed by caliper log to place the top of the Class 'G' cement at the liner top. A minimum of 25% excess in the open hole section will be included.

Lead Slurry:

Type:

Lightweight scavenger

Weight:

13.1ppg

Yield:

1.69 cu. ft./sack

Cement Required:

25 sacks

Tail Slurry:

Type:

Class 'G' and additives

Weight:

15.6 ppg

Yield:

1.18 ft/sack

Cement Required:

59 sacks (25% excess openhole plus shoe

joint)

- 7. BOP equipment while drilling under surface casing will include a dual ram-type preventer with pipe/blind rams and annular preventer. All equipment while drilling below surface casing will have a minimum working pressure of 5,000 psi. (See Exhibit 'D'.) The accumulator will be of sufficient size to open and close all components without using the pump. The minimum testing requirements will be as follows:
 - a) All ram-type preventers will be tested to the rated working pressure of the stack.

b) The annular-type preventer will be tested to 50% of its rated working pressure.

c) Tests will be run at the time of installation and following repairs, prior to drilling out of each casing shoe, and at least every 30 days.

d) Casing strings - The surface casing shall be pressure tested to 2500 psi prior to drilling the cement retainer; test pressure will not exceed 70% of the casing's internal yield pressure.

8. Mud Program:

From	<u>To</u>	Type Mud	Weight	<u>0i1 %</u>	Water Loss
2250'	5400'	Chem-Gel	10.3-10.5	0	15-22 cc's
5400'	TD	Chem-Gel	10.3-19.5	0	10-12 cc's

*See attached well history

- 9. Type of drilling tools and auxiliary equipment:
 - A. A kelly cock of 5000 psi WP will be used.

B. A pit volume indicator, mud flow indicator, and pump pressure recorder will be used.

C. A 5000 psi working pressure full opening safety valve will be available to stab into the drill pipe when necessary if the kelly is not in the string.

D. A drilling rate recorder calibrated to record drilling time for each one foot interval will be used.

10. Deviation Control:

Surface Location: 1375' FNL, 1635' FEL, Sec. 26, T38S, R25E

From	<u>To</u>	Maximum Distance Between Surveys		Maximum Change Per 100' of Depth
2250'	2850 '	90 '	2°	3°
2850'	TD	300'	1°	1°

Refer to Exhibit 'E' detailed wellbore diagram and drill out prodecure.

11. The anticipated duration:	30 days.
REGION APPROVAL	
Approved	Date
Originator:	
THC:	
FFS: Fred Schneider (by Jan Tongs	~ 7/13/88)
	3-88
DRT: Douglas Tether 7	-13-82
WTR: (7/1	9/88
DES: D. E. Suil 3/20/81.	
JLM: J. Messer 7/2	2/88
RJD: Track 1/25	/88
JRK: 7/26	/88

2. Full opening line - Tee and

the mud tank or pit.

two valves for flow to either

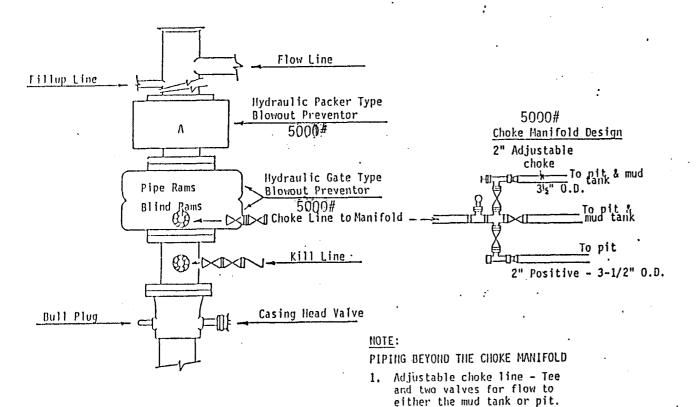


EXHIBIT 'D'

 Blowout preventors, master valve, plug valves, and all fittings must be in good condition. Use new API seal rings.

 All fittings (gates, valves, etc.) to be of equivalent pressure rating as preventors. Valves to be flanged and at least 2" unless otherwise specified. Valves next to BOP to be

Equipment through which bit must pass shall
as large as the inside diameter of the casing

that is being drilled through.

plug type and nominal 3".

4. Safety valve (OMSCO or equivalent) must be available on rig floor at all times and with proper connections. The ID of safety valves should be as great as ID of tool joints or drill pipe.

5. Kelly safety valve installed, same working

pressure as BOP.

 All lines and controls to preventors must be connected and tested before drilling out of surface pipe.

 BOP's must be fluid operated, complete with accumulator. Controls may be either on floor or ground near steps from rig floor.

8. Fillup line tied to drilling nipple, the connection must be below and approximately 90° to the flow line.

 Gauge will be installed for testing but removed while drilling.

10. Casinghead and casinghead fittings to furnished by Marathon Oil Company.

11. Chokes must be adjustable and positive.

12. One side of casinghead may be bull plugged.

WHEN DRILLING -- USE:

Top preventor -- Drill pipe rams. Bottom preventor -- Blind rams.

WHEN RUNNING CASING -- USE:

Top preventor -- Casing rams. Bottom preventor -- Blind rams.



Dianne R. Nielson, Ph.D.

DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING

355 West North Temple Dee C. Hansen
Executive Director

3. Nielson, Ph.D.
Division Director

3. S55 West North
3 Triad Center,
5 Salt Lake City, 1
801-538-5340 3 Triad Center, Suite 350 Salt Lake City, Utah 84180-1203

August 29, 1988

Marathon Oil Company P. O. Box 2690 Cody, Wyoming 82414

Gentlemen:

Re: Tin Cup Mesa 5-26 - SW NE Sec. 26, T. 38S, R. 25E - San Juan County, Utah 1375' FNL. 1635' FEL

Approval to re-enter the referenced well is hereby granted in accordance with Section 40-6-18, Utah Code Annotated, as amended 1983; and predicated on Rule R615-2-3, Oil and Gas Conservation General Rules, subject to the following stipulations:

1. Prior to commencement of drilling, receipt by the Division of evidence providing assurance of an adequate and approved supply of water as required by Chapter 3, Title 73, Utah Code Annotated.

In addition, the following actions are necessary to fully comply with this approval:

- Spudding notification within 24 hours after drilling operations commence. 1.
- 2. Submittal of an Entity Action Form within five working days following spudding and whenever a change in operations or interests necessitates an entity status change.
- 3. Submittal of the Report of Water Encountered During Drilling, Form OGC-8-X.
- Prompt notification if it is necessary to plug and abandon the well. Notify John R. 4. Baza, Petroleum Engineer, (Office) (801) 538-5340, (Home) 298-7695, or Jim Thompson, Lead Inspector, (Home) 298-9318.
- Compliance with the requirements of Rule R6I5-3-22, Gas Flaring or Venting, Oil 5. and Gas Conservation General Rules.

Page 2 Marathon Oil Company Tin Cup Mesa 5-26 August 29, 1988

- 6. Prior to commencement of the proposed drilling operations, plans for facilities for disposal of sanitary wastes at the drill site shall be submitted to the local health department. These drilling operations and any subsequent well operations must be conducted in accordance with applicable state and local health department regulations. A list of local health departments and copies of applicable regulations are available from the Division of Environmental Health, Bureau of General Sanitation, telephone (80I) 538-6121.
- 7. This approval shall expire one (1) year after date of issuance unless substantial and continuous operation is underway or an application for an extension is made prior to the approval expiration date.

The API number assigned to this well is 43-037-31368.

Sincerely,

Associate Director, Oil & Gas

Ir Enclosures

cc: Branch of Fluid Minerals

D. R. Nielson

8159T

SUA (Do not use th)	DRY NOTICES AND	A AMONE OF DILL DACE	to a different reservoir.		
1.	UM "APPLICATION FOR PE	**************************************	CEIVISIN	7. UNIT AGREEMENT	
OIL CAS	O otess Water Inj	ector 1	3-1-0	Tin Cup Me	
Marathon Oi	l Company	22 1	NOV 14 1988	Tin Cup Mo	esa
3. ADDRESS OF OPERATO	D &	82/1/	DIVISION OF	5-26	
P. U. BOX 20 4. LOCATION OF WELL I See ging apace 17 be	690, Cody, Wyoming Report location clearly and in ac	COPURED WITH ARY SO	L, GAS-&-MINING	10. FIELD AND POO	
1375' FNL & 1				Tin Cup M	OR ALK. AND
13/3 THE & 1	Comment of			Sec. 26.	T38S, R25E
14. PECHIT NO.	; 15, 4127A710)	is ISnow whether of, Rt.	, CL FIC.)	12. CODRTY OF TA	RIAM 13. STATE
43-037-31368	/	5111'		San Juan	1 NTAIL
10.	Check Appropriate Bo	x To Indicate Nati		or Other Data	
	NOTICE OF INTENTION TO:		WATER BEUT-OFF		THO WELL
TIST WATER BEDT- PRACTURE TREAT	OFF PULL OR ALTER		PRACTURE TREATMENT	ALTERI	KC CTRIMO
EHOOT OR ACIDIZE	ABANDON*		Reactiv		ANEXI.
REPAIR WELL	CHANCE PLANS		(Other)	eanits of multiple comple completion Report and La	Uon on Well
nent to this work.	ok conflicted operations (Clear if well is directionally drilled in the confliction of the conflictin of the confliction of the confliction of the confliction of the			·	•
	•				
		•	·		
	. 2 5, 1988 necessary	lled and with	e undertaken to n essed by the BLM	re-enter the pro . On September	eviously 26, 1988
spudded well	. BOP's were insta #4 commenced actual	·			
spudded well	. BOP's were insta		•		
spudded well	. BOP's were insta		•	_	
spudded well	. BOP's were insta			.•	
spudded well	. BOP's were insta	·			į
spudded well	. BOP's were insta				
spudded well Coleman Rig	. BOP's were insta #4 commenced actual		Title & Contract	. (Houston)	į
spudded well Coleman Rig	. BOP's were insta	RF, FMK, ECS,	Title & Contract atory Coordinato	(Houston)	! ptember 26. 198

*See Instructions on Reverse Side

	• •		·c	SUBMIT IN TRIP	A-Z-	Buoget Bureau N Expires August 3	11, 1985
Form 3160-5 (November 1983)	U DEPARTM	OF THE		Commence of the commence of th	" F 3. L	LARE DIBIGNATION .	RE BARLAL NO.
(Formerly 9-331)	DEFARITATION RUNEAU	OF LAND MANA	GEMENT			U-31928	
		ES AND REP		WFILS	6. 1	F INDIAN, ALLOTTER	OF THIS ATTE
SUN					r.		
(Do not use tun	UM "APPLICAT	ION FOR PERMIT—	for such proposal			HIT AUBIEMENT HAS	. 8
OIL TV CAS		n	L. J. 277	as an Injec	ton	Tin Cup Mes	a
2. RAME OF OPERATOR	LJ ereta	<u>Permitted to</u>	be arilled	as an injec	ê. 3	ARK OR LEADE NAM	
Marathon Oi	Company		MIN CO	173777777		Tin Cup Mes	<u>a</u>
3. ADDRESS OF OPERATO	L COMPLETE STATE		Dale	SEWW S	III 15.	5-26	
P. O. Box 26	590, Codv, 1	Avomina 8241			10	FIELD AND POOL, OL	WILDCAT
See also space 17 be	heport incation cie	ariy and is accordance	DE DE	C 0 9 1988 C		Tin Cup Mes	
1375" FNL &	1635' FEL				11.	BAC. T. R. M. OR A SORTET OR AREA	
		. *	Di Di	vision of			
	The state of the s	and the second	UIL, G	AS & MINING		Sec. 26, T3	8S, R25E
14. PREMIT NO.	i til v	15. ELEVATIONS (Show		2 (14)	12.	COURTY OF PARISE	1
43-037-3136	8	5.	101' KB		<u> </u>	San Juan	<u>Utah</u>
1 G.	Cheek App	propriate Box To I	ndicale Natur	e of Notice, Rep	ort, or Other	Data	
	NOTICE OF INTENT		•		RUBERGURRY		
		LL OR ALTER CASING		WATER RECT-OFF		ERPAIRING T	ratt
TEST WATER BEDT-	-	ULTIPLE COMPLETE		PRACTORE TREATM	ENT .	ALTERING C.	LEING
EMOOT DE ACIDIZE	 	T KDOK.		SHOOTING OR ACID	121MG	ZEKHODIKAZ	K#*
REPAIR WELL		MANCE PLANS		(Other) First		anitimia anoministini	<u> </u>
(Other)				Compietion	r Recompletion	Peboli FDC Pol 10	: E.)
prepaised work. I nent to this work.)	[AG] I GILECTION	ations (Clearly state ally drilled, give sub-	surface locations	and measured and t			
			•				•
				•			
		•		•			
producing	oil and gas	well first po to the Tin (Frank Krugh I	Cup Mesa Fa	acility. Th	is was re	ported to Mr	The well is Lynn
	•					•	
				•	•		
		•					 i ·
			-	•			2
•					•		
RIM-Oria 2	3cc 9	JDOGM-2, WRF,	EWK TKC.	Title & Con	tract (Ho	uston)	.· •
DEPIPOT 19 0			TEIN, TNO,	TITLE & COIL	J. 400 (110	~~~~~ <u>~~~~</u>	
SIGNED GRY) lala		Regul	atory Coordi	nator	Decer Decer	mber 6, 1988
(This space for Fed	eral or State care	EM)					
		- ,				DATE	
APPROVED DY CONDITIONS OF A	PPROTAL, IF AS	TI: "					

*See Instructions on Reverse Side

gaganden en en en en en en en en en en en en e	mucces museus No. 11.4-110. Expires August 22 (16.5
Seem 316(-5) (Rovember 1983) (Formerly 6-331) DEPARTMENDED OF THE INTERIOR very pure) BUREAU OF LAND MANAGEMENT	U-31928
SUNDRY NOTICES AND REPORTS ON WELLS (Do not use this form for proposals to drill or to despres or plug back to a different reservoir. (Do not use this form for proposals to drill or to despres or plug back to a different reservoir. (The "Application FOR PERMIT—" for such proposals.)	L ir indian, amiottal de Taul mane
1.	Tin Cup Mesa
DECENOTED	Tin Cup Mesa
Marathan (il Company	5-26
P. D. BOX 2690, Cody, Wyoning 82414 All DECULATION OF WELL INCOME DECULATION OF WELL INCOME DECULATION OF WELL INCOME. See also apper 17 below.)	Tin Cup Mesa
T375" FNL & 1635' FEL DIVISION OF OIL, GAS & MINING	11. BEC. T. B. K. DE BLK, AND BORYET OR ALEA
1 15. ELEVATIONS (SHOW WORLDES DI, ET, CL. ENG.)	Sec. 26, T38S, R25E
43-037-31368 5111' KB	San Juan Utah
THET WATER BEDT-OFF PULL OR ALTER CASING WATER RECT-OFF FRACTURE TREAT EMOUT OR ACIDIER ABANDON* CHANCE FLANS (Other)	REPAIRING VELL ALTERING CASING ANADOMNERT* Altering of Well Altering casing Anaponisms Altering casing Anaponisms Anaponisms Anaponisms Anaponisms
The above referenced well was permitted to be drilled as an favorable oil production from the proposed injection zone, Mapproval to place this well on production. At this time, ho want to cancel the injection permit because the well may be oil production drops. Presently a flowline is being install originaly proposed injection line route to the Tin Cup Mesa will be measured and stored prior to shipping.	Marathon Oil Company request owever, Marathon does not converted to injection once led and will follow the
	•

November 22, 1988 Regulatory Coordinator (This space for Peneral or State care APPROVED DY A functy V K
CONDITIONS OF APPROVAL, IF ANY: ACCEPTED BY THE STATE OF UTAH DIVISION OF OIL, GAS, AND MINING *See Institutions on Revene

BLM-Orig & 3--cc: SUDOGM-2, WRF, FMK, TKS, Title & Contract (Houston)

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and wiBYD United States any false, fictitious or fraudulent statements or representations as 10 kg

STATE	OF	HATU	-	
DIVIS	NO	OF OIL	GAS AND	MINING

VISION O	F OIL. GAS AN	D MINING		OPERATOR MARATHON OIL COMPANY				OPERATOR CODEN3490 >					
NTITY ACT	ION FORM - DO	GM FORM 6		; , ·	ADDRESS						PHONE	E NO. ()	
PERATORS	MUST COMPLETE			R WHEN CHANG	E IN OPERATIONS OR	INTEREST	S NECES:	SITATI	ES CHA	ANGE I	N EXISTING EN	TITY NUMBER ASS	IGNMENT.
ACTION CODE	CURRENT ENTITY NO.	NEW ENTITY NO.	API NUMBER		WELL NAME		- 99	SC	TP	LOCA1	COUNTY	DATE	DATE
В	99999	2765	43-037-31368	TIN CUP	MESA #5-26		SWNE		38S		SAN JUAN		,
OMMENTS:	FIELD-TIN LEASE-FEI UNIT-TIN		PROPOSED 2 (2 OTHER V 1-9-89		EC. 26 OPERATED	BY MARA	ATHON,	UNI	r WEI	LL, A	SSIGN SAME	ENTITY 2765	ON-)
													·
OMMENTS:					ENTION BY TAS, FION FORM, & WE								
OMMENTS:							•						
·													
OMMENTS:													
						u ele ele e n ele ele ele ele ele ele ele ele ele el							
OMMENTS:													
													

ACTION CODES: A - ESTABLISH NEW ENTITY FOR NEW WELL

B - ADD NEW WELL TO EXISTING ENTITY

C - RE-ASSIGN WELL FROM ONE EXISTING ENTITY TO ANOTHER EXISTING ENTITY

D - RE-ASSIGN WELL FROM ONE EXISTING ENTITY TO A NEW ENTITY

E - OTHER (EXPLAIN IN COMMENTS SECTION)

(SEE INSTRUCTIONS)

LCR

SIGNATURE

ADMIN. ANALYST

12-13-88

TITLE

DATE

Division of Oil, Gas and Mining PHONE CONVERSATION DOCUMENTATION FORM

Well File
Date of Phone Call: 10.13-88 Time: 8:09
DOGM Employee (name) Cami (Initiated Call [1]) Talked to: Name Lank (Initiated Call [1]) - Phone No. () of (Company/Organization) Marathon Oil Co
Topic of Conversation: <u>Need Spud Report first prod</u> 10-5-88 and possible WCR Entity action Report.
Highlights of Conversation: Will call back - Called back 12-14-88 8:40 Am gave me spend report, I movined out Entity liction forms to trank Land he would mail them back ASAP.

(This space for Frae:	"ATTEUTE	(Fee)	Brai	nch of Fluid Min	erals	DEC 23	1988
ZICKED GREAT THE	, enla		Regul	atory Coordi	nator	December	6, 1988
· ·			FMK, TKS,	Title & Cor	itract (Houst	on)	
•	٠.	•	•		•		•
					· • • .	i	
				•	•		
			-	. •	·		
producing o	il and gas	to the Tin	Cup Mesa F	acility. Th	1988, at 5:0 is was report mber 6, 1988	ted to Mr. L	welli ynn
:		•		•			•
					· · · · · · · · · · · · · · · · · · ·	,	
. •			•	• Marian	. •		
17. PESCRICE PROPOSED OR Prescried work. If nent to this work.)	well is direction	ATIONS (Clearly state Ally crilled give sub	all pertinent de auriace locations	talis, and give perti and measured and	nent dates, including true vertical depths	estimated date of for all markers and	stropes peru-
REPAIR WELL (Other)		TAXCE PLANS		INDER . Rec	t Production or results of multip or Recompletion Rep	le completion on Wort and Log form.)	
PRACTURE TREAT		ULTIPLE COMPLETE		PRACTURE TREATM	DILING	TERING CYRING	
TEST WATER BEDT-OF		TLL OR ALTER CARING		WATER SECT-OFF		ERPAIRING WELL	
16.	Check App HOTICE OF INTENT		Indicate Natu I	re of Notice, Kep	oort, or Other Dat		
43-037-31368			101' KB			Juan	<u>Utah</u>
34. PZEMIT NO.		11. ELEVATIONS (Sho	whelber of, KT,	S & MINING	12 000)	TT OR PARISH 15.	42428
		9	Oil Oil	ISION OF		26, T38S,	P25F ·
See also space 17 belo At surface 1375' FNL &	o₩.)	1. x .c.	JAN	1031988 4	11. aac.	Cup Mesa	n
P. O. Box 26	90, Cody,	Wyoming 8241	CO BER ALY SIAL	· Monnementer.	## ## 1	O AND POOL, OL WILL	DCAT
Marathon Oil	Company		TONIS (C.		A) S. WALL		
2. NAME OF OPERATOR	CTEER	Permitted to	be drille	<u>d as an Inje</u>	E. FANK	OR LEADE NAME	
1.	UR -APPLICAT	JON FOR TEARLE			7. CALT	Cup Mesa	
SUN (Do not use this		TES AND REP	AN AP TIME DECK !	O C CONTINUE	otr.		
(Formerly 9-331)	BUREAU	CF LAND MAN.	AGEMENT		1	1928	LISE PANE
Fg/fm 3160-5 (November 1983)	DEPARTM	TED STATE	ES INTERIOR	SUBMIT IN TR (Other instruction verse side)	Exp	LIFES AUGUST 31 19	55.5
					1 530	get Bureau No. 10	34-014-

*See Instituctions on Reverse Side

APPROVED ET CONDITIONS OF APPROVAL, IF ANT:

STATE OF UTAH

ENTITY ACTION FORM - DOGM FORM 6

OPERATOR

MARATHON OIL COMPANY

OPERATOR CODE N-3490

P. O. Box 2690 ADDRESS .

PHONE NO. 307 , 587-4961

DIVISION OF OIL, GAS & MINING

Cody, WY 82414

OPERATIONS OR INTERESTS NECESSITATES CHANGE IN EXISTING ENTITY NUMBER ASSIGNMENT.

				R WHEN CHANGE IN OPERATI		I VECES.	PILATE	WELL	LOCAT	TON	SPUD	EFFECTIVE
ACTION CODE	CURRENT ENTITY NO.	NEW ENTITY NO.	API NUMBER	WELL NAME							DATE	DATE
CODE	ENTITI NO.	ENTITE NO.	·			99	sc	TP	RG	COUNTY		
В	2765	2765	43-037-31368	Tin Cup Mesa #5-26		SENW	26	38S 2	25E	San Juan	3/3/88	
COMMENTS:	Coleman Rig	#4 Spudded. s re-entered	On 3/21/88 I by Coleman R	drilling was suspen lig #4 and the well	ded and the w was placed on	ellbor produ	e was	s sed	ure	d. On Septe	mber 25, 198	38
COMMENTS:			<u> </u>		•							
					•							•
	,	·	·						—т		1	1
:					,							
COMMENTS:												
												· ₁
										·		
COMMENTS:			<u>. </u>	<u> </u>								
COMMENTS:						-						
										·		

ACTION CODES: A -ESTABLISH NEW ENTITY FOR NEW WELL

B - ADD NEW WELL TO EXISTING ENTITY

C - RE-ASSIGN WELL FROM ONE EXISTING ENTITY TO ANOTHER EXISTING ENTITY

D - RE-ASSIGN WELL FROM ONE EXISTING ENTITY TO A NEW ENTITY

E - OTHER (EXPLAIN IN COMMENTS SECTION) (SEE INSTRUCTIONS)

Production Acctg Supv 12/29/88

TITLE

DATE

BUREAU OF LAND MANAGEMENT

SUBMIT IN DUPLICA

Form approved.	
Budget Bureau No.	1004-013
Expires August 31,	1985

Suboam

DESIGNATION	AND	SERIAL	NO.
	DESIGNATION	DESIGNATION AND	DESIGNATION AND SERIAL

(See other in-	Expires August
structions on reverse side)	5, LEASE DESIGNATION
	11-31928

											31320	
WELL COM	MPLETIO	N OR	RECON	MPLET	ION F	REPORT	AN	D LO	3 *	6. IF IN	DIAN. ALL	OTTEE OR TRIBE NAME
1a. TYPE OF WELL	J: (VELL	GAS WELL	7	DRY 🗌	Other				7. UNIT	AGREEME	NT NAME
b. TYPE OF COMP			W.I.I	ا اسـ	PRY LJ	Other				1	n Cup	
NEW X		DEEP-	PLUG BACK	DIF	Vic Ed. S	Gillet	of the P. Standings	g School Teathering Teath			UR LEASI	
2. NAME OF OPERATO	OR .		***************************************		TEAR!	a ()	ZIIV	W 11 1	R s d	Ti	in Cup	Mesa
Marathon	Oil Comp	any			THE C		eren eren 6			9. WELL		
3. ADDRESS OF OPER	ATOR					17/31	9010	100	U)	5-	∙26	
P. O. Box							2319					OL, OR WILDCAT
4. LOCATION OF WEL. At surface	L (Report loca	ation clea	rly and in c	ccordanc	e with an		uiremen SION O			I	in Cup	
1375' FNL At top prod. inte	. & 1635'	FEL below				OIL, GAS				11. SEC.	T., R., M., Rea	OR BLOCK AND SURVEY
At total depth											oc 26	, T38S, R25E
				14. PI	ERMIT NO.		DATE	ISSUED		12. COU'N	TY OR	1303, REJL
				Δ	3-037-	31368	1			PARI	^{вн} an Jua	n Utah
15. DATE SPUDDED.	16. DATE T.D.	REACHE	D 17. DATE	COMPL.	(Ready to		18. ELE	VATIONS (D	f, RKD,	RT, GR, ETC		ELEV. CASINGHEAD
9/25/88	10/23	8/88	12	2/3/88	;	-	511	1' KB	5	097' GF	₹	
20. TOTAL DEPTH, MD A	TVD 21. P	LUG, BACH	T.D., MD &			TIPLE COM		23. INTE	RVALS	ROTARY	TOOLS	CABLE TOOLS
5781'		5661'		1				ا م	→	578	31′	N/A
24. PRODUCING INTERV	AL(8), OF TH	18 COMPL	ETION-TOP	BOTTOM	, NAME (N	D AND TVI	·) •				1	25. WAS DIRECTIONAL SURVEY MADE
•												*
Upper Isn 26. TYPE ELECTRIC AN	nay 5494'	<u>-5526</u>	<u>'</u>			11.						Yes
GR-CCL-CE	age to great the			R: DL	L-MSFL	-CAL-G	R-CP:	: DIL-S	SFL-S	P-GR-C/	1	WAS WELL CORED
28.		and the second				ort all stri						
CABING SIZE	WEIGHT, L	B./FT.	DEPTH SE	r (MD)	HOI	LE SIZE		CEM	ENTING	RECORD		AMOUNT PULLED
9-5/8"	40#		225			1/4"				to sur		None
<u>7"</u>	26#		536	50′ <u> </u>	8-	1/2"	_	1040 sa	<u>acks</u>	to 2210	<u>)'</u>	None
		<u> </u>										
29.	1											
SIZE	TOP (MD)		RECORD					30.		TUBING R		I
5"	5014' KE		80′ KB	8ACK8 C	sack	SCREEN	(MD)	SIZE 2	7/8	DEPTH SET	40'	5363
	3014 KE	3/	00 KB	143	Sack	· · · · · · · · · · · · · · · · · · ·			// -		10	3303
31. PERFORATION RECO	ED (Interval,	size and	number)			l 82.	A C	ID SHOT	FRACT	TIRE CEM	ENT SOI	JEEZE, ETC.
•			ŕ				NTERVA					MATERIAL USED
5494′-5506′	" 4 / SI)F					⁷ -55		i			//200 gals/ft
5512'-5526'	, , , , , , ,	· .			1.11							taining
						l				ditive		
· .												
33.*						UCTION						
ATE FIRST PRODUCTIO	N PRO		METHOD (F	lowing, g	ae lift, pu	mping—ei	te and t	ppe of pun	ıp)	W	ELL STAT	US (Producing or
12/5/88	Market Co. 1		ing		<u>.</u>						Produ	ıcing
PATE OF TEST	HOURS TESTE	D C1	HOKE SIZE	TEST	N. FOR PERIOD	OIL-BBI		GAS-MC		WATER-		GAS-OIL RATIO
12/16/88 rlow, Tubing Press,	24		23/64			<u>' </u>	257	7	295	<u> </u>	23	1148
290 psi	N/A	24	LCULATED -HOUR RATE	: OIL—	ъвг 257	GAS	—мс г. 2:	95	WATER-	ныс. 23	OIL	GRAVITY-API (CORR.) 45
34. DISPOSITION OF GAI										1	TNESSED	
Processed a		from	Tin Cup	Mesa	Gas	acilit	<u>y</u>			Fie	ld For	reman
5. LIST OF ATTACHMENTS												
Attachment	#1 (Dev	ation	Survey	/) Att	achmer	nt #2 (Dril	ı Stem	lest	<u>) </u>	1	
66. I hereby certify t	THE LUC TOTES	ng and	attached in:	cormation	a 18 compi	ere and co	rrect as	determine	ed from	ali availal	ne record	
SIGNED	KIL/O	when		ידי	TLE I	Regulat	ory	Coordii	nator	'	ATE	1/20/89

MARKERS KB DATUM	TOP S////	S. DEPTH VERT, DEPTH	24, 2733, 260, 2687, 2687, 2687, 767, 767, 767, 767, 767, 767, 767,	-
38. GEOLOGIC MARKERS		NAME MEAS.	 Skinarump Moenkopi Cutler Cutler Honaker Trail Paradox Upper Ismay Gothic Desert Creek Contract (Houstor)	Prince.
and contents thereof; cored intervals; and all tool open, flowing and shut-in pressures, and	DESCRIPTION, CONTENTS, ETC.		SUBOGM-2, WRF, FMK, TKS, GBP, Title & CC: SUDOGM-2, WRF, FMK, TKS, GBP, Title & CC: SUDOGM-2, WRF, FMK, TKS, GBP, Title & CC: SUDOGM-2, WRF, FMK, TKS, GBP, Title & CC: SUDOGM-2, WRF, FMK, TKS, GBP, Title & CC: SUDOGM-2, WRF, FMK, TKS, GBP, Title & CC: SUDOGM-2, WRF, FMK, TKS, GBP, Title & CC: SUDOGM-2, WRF, FMK, TKS, GBP, Title & CC: SUDOGM-2, WRF, FMK, TKS, GBP, Title & CC: SUDOGM-2, WRF, FMK, TKS, GBP, Title & CC: SUDOGM-2, WRF, FMK, TKS, GBP, Title & CC: SUDOGM-2, WRF, FMK, TKS, GBP, TITLE & CC: SUDOGM-2, WRF, FMK, TKS, GBP, TITLE & CC: SUDOGM-2, WRF, FMK, TKS, GBP, TITLE & CC: SUDOGM-2, WRF, FMK, TKS, GBP, TITLE & CC: SUDOGM-2, WRF, FMK, TKS, GBP, TITLE & CC: SUDOGM-2, WRF, FMK, TKS, GBP, TITLE & CC: SUDOGM-2, WRF, FMK, TKS, GBP, TITLE & CC: SUDOGM-2, WRF, FMK, TKS, GBP, TITLE & CC: SUDOGM-2, WRF, FMK, TKS, GBP, TITLE & CC: SUDOGM-2, WRF, FMK, TKS, GBP, TITLE & CC: SUDOGM-2, WRF, FMK, TKS, GBP, TTS, TKS, TKS, TKS, TKS, TKS, TKS, TKS	
ow all important : erval tested, cus	воттом		5576′ M-Orig & 2-	
OUS ZONES: (Sh cluding depth int	тор		5426' BL	
 SUMMARY OF POROUS ZONES: (Show all important zones of porosity drill-stem, tests, including depth interval tested, cushion used, time recoveries): 	FORMATION		Upper Ismay	

<u>Deviation Survey</u>

Depth	Angle	<u>Direction</u>	<u>Depth</u>	Angle	<u>Direction</u>
100'	1/20		2720′	$6-3/4^{\circ}$	S65°E
338′	1/40		2840′	$5-1/2^{\circ}$	S640E
604′	1/20		2966 <i>′</i>	4-1/20	S58°F
1120'	1/40		3108′	3-3/4	\$57°E
1607	1/20		3213′	$3-1/4^{0}$	
2629′	10		3306′	$\frac{3}{3}$ 0 1/40	
3388'	1/40		3609'	1-3/40	
3881′	3/4		3887 <i>′</i>	1-1/2	
4410′	1/25		4167′	$1 - 1/2^0$	
4935'	1/20		4473′	$\frac{1}{10}\frac{1}{20}$	_
Plugged	hack to	2250'	3537′	1-3/40	S89 ⁰ E
2269	203/40	N56°W	3998′	$\frac{1}{1}\bar{0}^{1/20}$	N67°E
2361'	20	N84°F	4512'	10	N67°E
2391′	3-1/2	N67°F	4865′	3/40	N53 ⁰ E
2461'	5-1/4	566 ⁰ F	5328′	1/4	N32°F
2554'	7-1/2*	566 ⁰ F	5439′	1/40	
2614'	$7-3/4^{\circ}$	S65°E	5595′	1/40	
	,	- -	5752′	1/4° 1/2°	

Attachment '1'

DRILL STEM TEST

DST #1

Formation: Lower Paradox

Top Packer: 5354'

Lower Packer: 5455'

Cushion: 1000# N_2 followed by 1000 ft. of H_2 0.

Top Choke: 1/4

Bottom Choke: 3/8

Test was reverse circulated.

IF 5 min., ISI 60 min., FF 75 min., FSI 240 min.

	Upper Gauge	-	Lower Gauge
IH	4831.5	IH	5210
IF	2220.3-2265.2	IF	2276.7-2367.4
ISI	2624.8	ISI	2730.2
FF	1633.5-1135.8	FF	1596.4-1279.0
FSI	1588.3	FSI	1687.1
FH	4809.0	FH	4984.4

Sample Chamber 100 PSIG Surface 800 CC mud

Temperature 1280F

This well was originally spudded on March 3, 1988. Due to formation overpressure and a lost fish, the well was plugged back to 2200' and evaluations of the hole were made. On September 25, 1988, the well was re-entered, the hole was sidetracked and drilled to TD. The well was originally permitted as an injection well however favorable oil shows prompted the well to be produced. Presently the well is producing with the injection permit being kept valid.

poge 1 of Z

WORKSHEET

Operator: Marather Well Name: Tin Cup Mean 5.26
Contractor: Coleman by 4 Rig Number: 4

Meas Depth ft	Inclination Drift Deg.	Total Departure Ft.
<u>100</u> 338	1/2	1.97
604	1/2	4.23
1607	1/2	10.73
<u>2361</u>		19,40
2391	<u>3/2</u> 5/4	30.85
2554	71/2	42.99
2720	63/4	63.54
2966	41/2	75.04 84.92
3108	314	100.16
3306 3609	3 1 3/4	165.03
3887 4167	. 1/2 1/2	121.56
4473) °	134,23
5328	1/4	12 141,3

MM 8/28/89

5595 14 142.55, 5752 1/2 143.92

DIRECTIONAL SURVEY RECORD WORKSHEET

Operator: Marthan Well Name: Tin Cup Mesa 5.76

Contractor: Rig Number: 4

8/28/89

				•						
Meas Depth ft	Inclination Drift deg	Bore Hole Bearing deg	Dog leg Severity deg/100	TVD ft	North/South Departure ft	East/West Departure ft	Closure Direction deg	Closure Distance ft	Vertical Section ft	Station to Trgt Pland ft
2269	3/4	N56°W			5.41	5,00			·	
a361	2°	N84°E	2.85	2360,97	N 7.05.	W4.59	N33,1W	8.41	<u>, </u>	
2391	31/2	N67E	5,64	2390,94	N 7.41	W 3.20	N23,4W	8,07		
2461	51/4	566E	5.48	2460.73	N7.31	E1,99	NISIE	7,63	·	
2554	7/2	366E	2.42	2553,15	N 3.17	E11.42	N74.SE	11.85		
2614	73/4	365E	0.47	2612.62	50.14	E18.67	S89.6E	18.67		
2720	63/4	S65E	0,94	2717.78	S 5.79	E 30,79	379.4E	31,33		
2840	5/2	564E	1.05	2837.09	S 11.30	E42.35	S75.1E	43.83		
2966	4/2	SS8E	0.89	2962.61	516.62	E 51.95	372.3E	54.54		<u> </u>
3/08	33/4	357E	0,53	3104.24	3 22.11	E 60.56	S 69.9E	64.47		
3537	13/4	589E	0,51	3532.72	5 28.05	E 79.99	S 70.7E	84.77		
3998	11/2	NGTE	0.16	3993,54	S 25,51	E 92,73	S 74.6E	96.19		
4512		NGTE	0.10	4507.42	521.19	E103.05	578.4E	105.21		
4865	3/4	N53E	0,09	4860,31	5 18.50	E 107.71	S 80.3E	109.29		
5328	1/4	N3ZE	0.11	5323.36	5 15,54	E 110.42	S82.0E	111.51		
		,								
			-							

Form 3160-5 (December 1989)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPROVED						
Budget Bureau No. 1004-0135						
Expires. September 30, 1990						

5. Lease Designation and Serial No.

U-31928

SUNDRY NOTICES	AND REPORTS ON WELLS	6 If Indian Allottee or Tribe Name
Do not use this form for proposals to dri	Il or to deepen or reentry to a different rese	ervoir.
Use "APPLICATION FOR	R PERMIT—" for such proposate 72 72 77	13-01 87
	- UNICOLOU	7. If Unit or CA, Agreement Designation
SUBMIT	IN TRIPLICATE	
i. Type of Well	MAY 21 199	Tin Cup Mesa 8 Well Name and No.
Oil Gas Well Other	,	8 Well Name and No.
2. Name of Operator	DIVISION OF	Tin Cup Mesa
Marathon Oil Company	OIL GAS & MINIT	9. API Well No.
3. Address and Telephone No.		43-037-31368 5-26 secj 10. Field and Pool, or Exploratory Area
P. O. Box 2690, Cody, Wyoming	82414 (307) 587-4961	
4. Location of Well (Footage, Sec., T., R., M., or Survey De	escription)	Tin Cup Mesa
1375' FNL & 1635' FEL, Section	n 26, T38S, R25E	11. County of Parisit, State
		Can luan litah
		San Juan, Utah
12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE,	REPORT, OR OTHER DATA
TYPE OF SUBMISSION	TYPE OF A	CTION
		Change of Pians
Notice of Intent	Abandonment Recompletion	New Construction
Subsequent Report OIL AN		Non-Routine Fracturing
Subsequent Report OIL AN	Casing Repair	Water Shut-Off
Final Abandonment Notice DRN	RJF Altering Casing	Conversion to Injection
JRB /	See Be	
John V	(Note: Repo	rt results of multiple completion on Well Completion or in Report and Log form.)
13 Describe Proposed or Completed Operations (Clearly state a	Il pertinent details and give pertinent dates, including estimated dat	
give subsurface locations and measured and true vert	cal depths for all markers and zones pertinent to this work.)*	
	//	
12.TAS 1		
Z MICRI	OFILM /	
<u> </u>		
H. FI	LE	
Lankamoineman		
Manathan Oil Company requests	approval to perform the following	ng work in association with a
water chut-off treatment St	eps #1 through #8 were verbally	approved by Lynn Jackson, BLM
Marci Silar-off ricarmettr. St	-cpc "1 on cag. "0 no c 3- 10	1 ' 1

Marathon Oil Company requests approwater shut-off treatment. Steps #1 Moab, on May 2, 1990 during a telep	through #8 were verbally appro	oved by Fally gackson, prin
BLM-Orig & 2cc: SUDOGM-2, WRF, F	FMK, SPO, WTR-5, Title & Contra	ct(Hous.)
4. I hereby certify that the foregoing is true and correct		
Signed RAMpala	Title Regulatory Coordinator	Date May 3, 1990
(This space for Federal or State office use) Approved by Mulliam C. Munger	Assistant District Manager	Date 5/10/90
Conditions of approval, if any.	ACCEPTED BY	• 1
	OF UTAH DI	
Fitle 18 U.S.C. Section 1001, makes it a crime for any person knowingly or representations as to any matter within its jurisdiction		
	See Instruction on Republic	40
	BY: frh	Mary Mary Mary Mary Mary Mary Mary Mary
	7	\supset

Tin Cup Mesa #5-26 San Juan County, Utah Pump Test, Water Shut-off, and Recompletion Procedure AFE #5-505-0

WELL DATA

Elevations:

GL: 5,097'

KB: 5,111'

Depth (KB):

TD: 5,781'

PBTD: 5,661'

Casing Record (KB):

Surface Production 9-5/8", 40#, N-80 set at 2,250' with 1,220 sks.

7", 26#, N-80 set at 5,360' with 1,040 sks.

Liner

5", 18#, P-110 set from 5,014-5,780' with 145 sks.

Tubing (KB):

2-7/8", 6.5#, N-80 EUE tubing. Bottom of mud anchor at 5542.55'.

Perforation Record (KB):

Upper Ismay

5,494-5,506' 4JSPF 5,512-5,526' 4JSPF

Proposed Perforations (KB): Upper Ismay

5,478-5,494' 4JSPF

PROCEDURE SUMMARY

The existing Upper Ismay interval perforations will be pump tested individually. Based on the results of the pump test, one or both of these perforation intervals will be cement squeezed to shut off associated water. An additional 16' of Upper Ismay pay from 5,478'-5,494' KB will be perforated and acidized. Any perforation interval left open following the squeeze will be acidized. The well will then be hung on pump.

Because it is suspected that the lower perforation interval is the primary source of water production and is contributing insignificant oil production, this procedure provides for a cement squeeze of that interval only. If the pump test results indicate that either the upper interval or both perforation intervals should be abandoned, then a separate cement squeeze procedure will be prepared.

PROCEDURE

- 1. Obtain a three-day production test and a water sample analysis (including percent fines) for this well immediately prior to Step No. 2. Take fluid shots for each test day.
- Haul three 400 Bbl. frac tanks to location and fill two tanks with Ismay produced water. MIRU completion rig.
- Unseat pump. IF NECESSARY, pump 80 bbls. Ismay water down backside to kill well and then hot oil (\pm 230° F) down casing with \pm 35 bbls. and then down tubing with \pm 35 bbls. Ismay oil.

- 4. NU 3,000# BOPE.
- 5. POOH with rods and pump. Release tubing anchor (set in 17,000# tension) and POOH with the tubing and anchor. Redress tubing anchor.
- 6. PU 6-1/8" bit and a scraper dressed for 7", 26# casing. Round trip bit and scraper to 5,014' KB (top of the 5" liner). LD bit and scraper.
- 7. PU 4-1/8" bit and a scraper dressed for 5", 18# casing. Round trip bit and scraper to PBTD. LD bit and scraper.
- 8. Rig up wireline company. PU Baker 5"-1BB Model 'K' Cement Retainer and Baker Model No. 20 setting tool and RIH on wireline. Correlate depth with Schlumberger CBL-GR run on 11/17/88. Set middle of cement retainer packing elements at 5,509' KB. Tag cement retainer top with setting tool to verify setting depth. POOH with setting tool and wireline. RD wireline company.
- 9. PU and RIH Baker cement retainer stinger, 2-7/8" SN, 18 jts. 2-7/8" N-80 tubing, and redressed Baker 7" tubing anchor. Run this assembly in the hole on 2-7/8" N-80 tubing and sting into retainer. Slackoff 10,000# tubing weight on cement retainer. Fill tubing with Ismay produced water and establish circulation through the retainer by pumping 2-3 Bbls. at no more than 2,200 psi applied surface pressure and 1/2 to 1 BPM. ND BOPE. Set tubing anchor in 15,000# tension.
- 10. Hang tubing in wellhead. RIH with 2-1/2" x 2" x 24' RHBC rod pump and rods pulled earlier. Shoot static fluid level and then hang well on pump. RD and release completion rig. Put the well on test immediately and continue testing until sufficient data is obtained to procede with Step No. 11 (approximately one week). Connect a NABLA dynamometer to the well each day (the data will be input into the WAVE software program to get an estimate of the producing fluid level from the downhole card). Monitor backside fluid level. Obtain a water sample for analysis prior to proceeding to the next step.
- 11. MIRU completion rig. POOH with rods and pump. NU BOPE. Release tubing anchor. Unsting from cement retainer and POOH and LD one jt. of 2-7/8" N-80 tubing. ND BOPE. Reset tubing anchor in 15,000# tension.
- 12. Hang tubing in wellhead. RIH with rod pump and rods previously pulled. Shoot static fluid level and then hang well on pump. Put the well on test immediately and continue testing until sufficient data is obtained to proceed with Step No. 13 (approximately one week). Shoot fluid levels frequently to keep the well in a pumped off condition. Obtain a water sample for analysis prior to proceeding to the next step.
- 13. MIRU completion rig. IF NECESSARY, pump 80 bbls. Ismay water down backside to kill well
- 14. POOH with rods and pump. Release tubing anchor (set in 15,000#

tension). NU 3,000# BOPE. POOH with tubing, tubing anchor, SN, and cement retainer stinger. LD seating nipple and anchor. Redress tubing anchor, if necessary.

- 15. If pump test results indicate that the lower interval (5,512-5,526'KB) is the primary source of water production and contributing insignificant oil production, proceed as follows: (If the upper interval (5,494-5,506'KB) or both Upper Ismay perf intervals are commercially unproductive, a separate cement squeeze procedure will be prepared).
 - a) PU cement retainer stinger and RIH on tubing. Sting into cement retainer (top of retainer at 5,508.5' KB).
 - b) Rig up cement service company (have cement service company haul 10 Bbls. fresh water to location).
 - c) With cement retainer packing elements still set at 5,509' KB, establish rate at less than 2,200 psi surface pressure with a full water column. Sting out of retainer. Roll hole to remove any oil and produced water by pumping 250 Bbls. Ismay produced water down tubing and up the annulus to an empty frac tank.
 - d) Pump 5 Bbls. fresh water spacer down tubing. Mix and pump 50 sks. Class "G" cement with 2% CaCl, (with additives to obtain a 4 hour pump time and 150-300 cc fluid loss at static BHT of 138° F). Displace cement to within 3 bbls. of end of tubing with a 5 Bbl. fresh water spacer and 24 Bbls. Ismay water.
 - e) Sting into retainer and pump 3.5 bbls. to displace cement across perforations. Attempt to pump an additional 6 Bbls. Ismay water but, to prevent fracturing the formation, do not exceed 1,200 psi and 1/2 BPM at the surface. Shut down for 15 minutes once the 6 Bbls. have been pumped or the maximum 1,200 psi surface pressure has been reached. Begin hesitation squeeze by pumping an additional 1/2 to 1 Bbl. and then shutting down for 15 minutes (recording the pressure at which the cement was pumped and the final pressure at the end of the 15 minutes).
 - f) Repeat hesitation squeeze by pumping 1/2 Bbl. increments until only 1 Bbl. of cement remains in the tubing or 300 psi over the final injection pressure is reached and held for 15 minutes. Note: 1,200 psi is the maximum pressure at which the cement is to be pumped, with 1,500 psi being the maximum squeeze pressure. It is perfectly acceptable to pump the cement at a much lower rate and pressure, with the squeeze pressure being 300 psi above the final injection pressure.
 - g) While holding the final squeze pressure on the tubing, unsting from the retainer and PUH 7 feet (the stinger will be out of the retainer and the remaining cement will be dumped when the tubing pressure begins to drop). Reverse circulate tubing clean with two tubing volumes (65 Bbls.) Ismay water at 1 BPM. This should

leave only about 2 feet of cement on top of the cement retainer. RD cement service company.

- 16. POOH with tubing and stinger. WOC overnight.
- 17. PU and TIH with 4-1/8" rock bit and 4 (2-7/8" O.D.) drill collars to drill out cement retainer and cement. RU power swivel and circulation equipment. Drill out cement retainer and cement. RIH and tag PBTD (record depth where tagged). RIH to 5,661' KB, cleaning out fill as necessary. POOH with tubing, drill collars, and bit. Round trip 5" casing scraper.
- 18. PU and RIH Baker 5" 43 B Model EA Retrievamatic packer, SN, and 2-7/8" tubing. Swab test squeezed perfs. Move and reset packer as necessary to swab test open perfs to check productivity. POOH with packer.
- 19. RIH and perforate the Upper Ismay from 5,478'-5,506' KB with 3-3/8" casing guns loaded for 90° phasing, 4 JSPF, and 16 gram charges. POOH with guns and RD wireline company.
- 20. PU mechanical CCL, 5" Service Adaptable Packer (SAP) dressed for one foot spacing between packing elements, and mechanical Injection Control Valve (ICV). Drop mandrel plug into packer and set ICV in the neutral position (allows fluid to enter tubing while RIH). Run this assembly in hole on 2-7/8" tubing and place the center of packing elements in blank casing at 5,470' KB (use mechanical CCL to get on depth). Do not set packer.
- 21. Rig up service company. Test surface lines to 3,200 psi. Acidize the Upper Ismay perfs in 1 ft. increments as follows:
 - a) Pickle the tubing by pumping 2 bbls. 15% Fe HCl PAD acid down the tubing, followed by 32 bbls. Ismay water. Reverse tubing with 40 bbls. Ismay water.
 - b) Set packer and pressure test between packing elements to 2,200 psi. Bleed off pressure and release packer. Close ICV and pressure test tubing to 200 psi to ensure valve is closing properly.
 - c) Move the middle of the SAP packing elements downhole to the bottom perf at 5,506' KB. Spot 1,500 gals of 15% Fe HCl PAD acid (containing iron sequestering agents, corrosion inhibitors, and non-emulsifiers) to within two bbls. of the SAP tool.
 - d) Acidize the perfs from 5,494'-5,506' KB with 650 gals acid and the perfs from 5,478'-5,494' KB with 850 gals acid (1,500 total gals acid) in 50 gal/ft. increments at a maximum pressure of 2,200 psi and maximum rate of 1/2 BPM. Leave the backside open to check for communication. If communication occurs, shut-in the backside immediately to force the acid into the formation.

(Note the rate, pressure, and whether or not communication occurs on each set).

e) Overdisplace the annulus with 25 bbls. Ismay water after the last set of perfs have been acidized.

Note: All personnel are to wear safety goggles during all acidizing activities.

- 22. Move down hole to 5,530' KB and reverse circulate 32 bbls. Ismay water to ensure that acid is not left across the squeezed perforations. Reset the packer at $\pm 5,530'$ KB. Pressure test the packer, valves and tubing to the maximum treating pressure to ensure that everything had been working properly. Release the packer.
- 23. PUH and reset at ±5,460' KB. RU swab equipment. Swab back load fluid until samples are clean and pH has returned to 5.5-6.0. Record fluid levels, cumulative recoveries and cuts hourly.
- 24. POOH with SAP assembly. RIH with production equipment, setting pump at least 30 feet below the bottom of the perfs. Shoot static fluid level before placing well back on pump.
- 25. RD completion rig.

APPROVALS:		
KDW/sp		

(December 1484)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPROVED Budget Bureau No. 1004-0135 Expires. September 30, 199.

5 Lease Designation and Serial No.

OHUBBY HATE				U-31928
	ES AND REPOR	· · · · · ·		6. If Indian, Aliottee or Tribe Name
Do not use this form for proposals t	o drill or to deeper	n or reentry to a differ	ent reservoir,	
Use APPLICATION	FOR PERMIT—" I	or such proposals	7375376167	_
	MIT IN TRIPLICA	EN PERSONAL PROPERTY AND ADDRESS OF THE PERSONAL	VIII	7. If Unit or CA. Agreement Designation
1. Type of Well		AN 1111 O.E.	1000	Tin Cup Mesa
Well Gas Other		JUL 0.5	1990	8. Well Name and No.
2. Name of Operator		THE STORAGE	A.C.	Tin Cup Mesa #5-26
Marathon Oil Company		DIVISION		9. API Well No.
3. Address and Telephone No.		OIL, GAS & N		43-037-31368
P. O. Box 2690, Cody, Wyon		(307) 587-4963		10. Field and Pool, or Exploratory Area
4. Location of Well (Footage, Sec., T., R., M., or Sur	•		-	Tin Cup Mesa
1375' FNL & 1635' FEL, Sec	tion 26, T38S	, R25E		11. County or Parish, State
				San Juan, Utah
12. CHECK APPROPRIATE B	OX(s) TO INDICA	TE NATURE OF NO	TICE, REPOR	RT, OR OTHER DATA
TYPE OF SUBMISSION		TYF	PE OF ACTION	
X Notice of Intent		Abandonment		Change of Plans
		Recompletion		New Construction
Subsequent Report		Pragging Back		Non-Routine Fracturing
	:	Casing Repair		Water Shut-Off
Final Abandonment Notice		Altering Casing		Conversion to Injection
	L	Other		-
12 D		Re	completion Report an	multiple completion on Well Completion or d Log form.)
 Describe Proposed or Completed Operations (Ciearly s give subsurface locations and measured and true 	tate all pertinent details, and vertical depens for all marks	give pertinent dates, including esti	mated date of starting	any proposed work. If well is directionally drilled
		and Lones pertinent to this wo	· · · · ·	

Marathon Oil Company requests approval to perform a water shut-off and to recomplete the Ismay formation in this well by following the attached procedure.

	OIL AND GAS
	N.N. RJF
	HID HILL
BLM-Orig & 3cc: SUDOGM-2, WRF, FMK, SPO, WTR-5, Title & Contract(Ho 848)
14. I hereby certify that the foregoing is true and correct Signed Regulatory Coordinator	June 8, 1990
Approved by Conditions of approval, if any: Approved by Title Strict Manager Conditions of approval, if any:	Date 14175 199
CONDO ACCEPTED B	Y THE STATE
Title 18 U.S.C. Section 1001, makes the grame inner, herests constangly and willfully in make to any department or age OF UTAH-E or representations as to any matter within its refrisciption	IVISION OF
Sew inciruotion or Reverse Stop Oller GAS, A	ND MINING STOP

Tin Cup Mesa #5-26 San Juan County, Utah Recompletion and Water Shut-off Procedure AFE #5-505-0

WELL DATA

Elevations: GL: 5,0971 KB: 5,111'

Depth (KB): TD: 5,781' PBTD: 5,661'

Casing Record (KB):

Surface 9-5/8", 40#, N-80 set at 2,250' with 1,220 sks. Production

7", 26#, N-80 set at 5,360' with 1,040 sks.

5", 18#, P-110 set from 5,014-5,780' with 145 sks. Liner

Tubing (KB): 2-7/8", 6.5#, N-80 EUE tubing. Bottom of mud anchor at 5542.55'.

Perforation Record (KB): Upper Ismay

5,494-5,506' 4JSPF 5,512-5,526' 4JSPF

Proposed Perforations (KB): Upper Ismay

5,478-5,494' 4JSPF

REVISED PROCEDURE

- Haul 3-400 Bbl. frac tanks to location. Fill two tanks with Ismay produced water.
- MIRU completion rig. Haul rig pump, power swivel, flat tank to location.
- POOH with rods and pump. Send pump in for inspection. NU 3,000# BOPE. RU circulation equipment. Attempt to establish circulation down tubing (should establish circulation after pumping about 7 bbls. Ismay water). Pump about 20 bbls. Ismay water down tubing, noting rate, pressure, and fluid cut. Release tubing anchor (set in 5,000# tension) and set 10,000# tubing weight on retainer. Pump down tubing at the same rate as above, noting pressure. Drop SV and RU circulation equipment. Pressure test tubing to 2,200 psi. Fish SV with sandline.
- Sting out of retainer. Pump down tubing at same rate as above, noting pressure. Role hole by circulating 200 Bbls. Ismay produced water down tubing and up the annulus to empty frac tank. POOH with tubing, tubing anchor, SN, and cement retainer stinger. LD and redress anchor catcher. LD SN.
- Cement the Upper Ismay perforations (5,512'-5,526' KB) as follows: 5.
 - PU cement retainer stinger and RIH on tubing. Sting into cement retainer (top of retainer at 5,508' KB).
 - Rig up cement service company. Test surface lines to 3,200 psi Have water truck on location with 80 Bbls. fresh water.
 - With cement retainer packing elements still set at 5,509' KB, C) establish rate at less than 2,200 psi surface pressure with a

- d) Pump 5 Bbls. fresh water down tubing. Mix and pump 75 sks. Class "G" cement (with additives to obtain a 4 hour pump time and 150-300 cc fluid loss at static BHT of 138 degrees F). Displace to within 3 bbls. of end of tubing with a 5 Bbl. fresh water spacer and 8.5 Bbls Ismay water.
- e) Sting into retainer and pump 3.5 bbls. to displace cement across perforations. Attempt to pump an additional 6 Bbls. Ismay water but, to prevent fracturing the formation, do not exceed 875 psi and 1/2 BPM at the surface. Note: After pumping 5 of the 6 bbls, 1,200 psi is the maximum pressure at which the cement is to be pumped, with 1,500 psi being the maximum squeeze pressure. It is perfectly acceptable to pump the cement at a much lower rate and pressure, with the squeeze pressure being 300 psi above the final injection pressure. Shut down for 15 minutes once the 6 Bbls. have been pumped or the maximum 875 psi surface pressure has been reached. Begin hesitation squeeze by pumping an additional 1/2 to 1 Bbl. and then shutting down for 15 minutes (recording the pressure at which the cement was pumped and the final pressure at the end of the 15 minutes).
- f) Repeat hesitation squeeze by pumping 1/2 Bbl. increments until only 1 Bbl. of cement remains in the tubing or 300 psi over the final injection pressure is reached and held for 15 minutes.
- g) While holding the final squeeze pressure on the tubing, unsting from the retainer and PUH 2 feet (the stinger will be out of the retainer and the remaining cement will be dumped when the tubing pressure begins to drop). Note: If the volume of cement remaining in the tubing prior to dumping the cement is less than 5.1 bbls (25 sks.), reverse circulate tubing clean with two tubing volumes (65 Bbls.) Ismay water at 1 BPM and proceed to Step No. 6. Otherwise, perform Step No. 5h and then proceed to Step No. 6e.
- h) PUH a sufficient distance (ie. if 5.1 bbls. to be dumped, then pull up to 5,240' KB) and reverse circulate two tubing volumes. Hesitation squeeze the Upper Ismay perfs (5,494'-5,506' KB) to a maximum squeeze pressure of 1,500 psi, but do not displace the cement top any lower than 5,474' KB. Proceed to Step No. 6e.
- 6. Cement squeeze the Upper Ismay perforations (5,494'-5,506' KB) as follows:
 - Pump 5 Bbls. fresh water down tubing. Mix and pump 75 sks. Class "G" cement (with additives to obtain a 4 hour pump time and 150-300 cc fluid loss at static BHT of 138 degrees F). With the bottom of the stinger still at about 5506' KB, balance a cement plug by displacing with a 5 Bbl. fresh water spacer and 22.5 Bbls. Ismay water. The top of the cement both in the tubing and the annulus will be at 4848' KB at this point (above the liner top at 5,104' KB).
 - b) PUH to 4,880' KB (cement top after PUH will be 4,887' KB) and reverse circulate tubing clean with two tubing volumes (57 Bbls.) Ismay water at 1 BPM.
 - c) Attempt to pump 11 Bbls. Ismay water but, to prevent fracturing the formation, do not exceed 1,200 psi and 1/2 BPM at the surface. Shut down for 15 minutes once the 11 Bbls. have been pumped or the maximum 1,200 psi surface pressure has been reached. Begin hesitation squeeze by pumping an additional 1/2 to 1 Bbl. and then

shutting down for 15 minutes (recording the pressure at which the cement was pumped and the final pressure at the end of the 15 minutes).

- d) Repeat hesitation squeeze by pumping 1/2 Bbl. increments until a total of 14.8 Bbls. of water (leaves 20' of cement over the top perf located at 5,494' KB) have been pumped or 300 psi over the final injection pressure is reached and held for 15 minutes. Note: 1,200 psi is the maximum pressure at which the cement is to be pumped, with 1,500 psi being the maximum squeeze pressure. It is perfectly acceptable to pump the cement at a much lower rate and pressure, with the squeeze pressure being 300 psi above the final injection pressure.
- e) POOH with tubing and stinger. WOC overnight.
- 7. PU and TIH with a 4-1/8" rock bit and 4 (3-1/8" O.D.) drill collars to drill out cement and cement retainer. RU power swivel and circulation equipment. Drill out cement retainer and cement with 6,000# WOB. Close casing valves and BOP pipe rams. Pressure test squeezed perfs to 1,000 psi for 15 minutes. Release pressure. RIH and tag PBTD (record depth where tagged). RIH to 5,661' KB, cleaning out fill as necessary. POOH with tubing, drill collars, and bit. Round trip 7" and 5" casing scrapers.
- 8. PU and RIH Baker 5" 43B Model EA Retrievamatic packer, SN, and 2-7/8" tubing. Swab test squeezed perfs. POOH with packer.
- 9. Proceed with Steps 19-23 of AFE procedure, but perforate and acidize only the interval from 5,494'-5,506' KB.
- 10. If the swab test data indicates that the oil cut is insufficient to justify continued production of the perfed interval or the total fluid rate exceeds the capabilities of the current equipment, then call the Cody office for orders. Otherwise proceed to the next step after contacting Cody.
- 11. POOH with SAP packer assembly. RU wireline company. RIH and perforate the Upper Ismay from 5,478'-5,494' KB with 3-3/8" casing guns loaded for 90 degree phasing, 4 JSPF, and 16 gram charges. POOH with guns and RD wireline company.
- 12. RIH with SAP packer set for 1' spacing and dressed for 5" casing. RU service company. Test surface lines to 3,200 psi. Pickle the tubing with 2 Bbls. 15% Fe HCL PAD acid. Acidize the Upper Ismay perfs from 5,478'-5,494' KB with 50 gal/ft 15% Fe HCL PAD acid at a maximum pressure of 2,200 psi and a maximum rate of 1/2 BPM. Proceed with Steps 21e-25 of the AFE procedure.

APPROVALS:	
1C.D. Walel 6/7/90	
SWHennings_6/7/9D	
	-Colin 6/2/90

Marathon Oil Company Well No. Tin Cup Mesa 5-26 SWNE Sec. 26, T. 38 S., R. 25 E. San Juan County, Utah U-31928

CONDITIONS OF APPROVAL

- 1. Notify Mike Wade of the Bureau of Land Management, San Juan Resource Area Office in Monticello at (801) 587-2141, at least 24 hours prior to commencing operations.
- 2. Submit a recompletion report (Form 3160-4) within 30 days of finishing the project.

Form 3160-5 (December 1989)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPROVED Budget Bureau No. 1004-0135 Expires. September 30, 1990

Lease Designation and Serial No.

J-31928

SUNDRY NOTICES AND REPORTS ON WE Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.

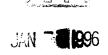
Use "APPLICATION FO	DR PERMIT—" for such proposafe UG 09 1990	
SUBMI	T IN TRIPLICATE	7. If Unit or CA. Agreement Designation
Type of Well Typ Oil	•	Tin Cup Mesa
Mell Well Other		8. Well Name and No.
2. Name of Operator		Tin Cup Mesa #5-26
Marathon Oil Company		9. API Well No.
 Address and Telephone No. P. O. Box 2690, Cody, Wyomin 	ng 82414 (307) 587-4961	43-037-31368
4. Location of Well (Footage, Sec., T., R., M., or Survey I	<u> </u>	10. Field and Pivol, or Exploratory Area
a. Botanon of Wen (Change, See, 11, 11, 11, 11, 11 Survey 2	out in priority	Tin Cup Mesa 11. County or Parish, State
1375' FNL & 1635' FEL, Sec.	26, T38S, R25E	San Juan, Utah
2. CHECK APPROPRIATE BOX	(s) TO INDICATE NATURE OF NOTICE, REPO	RT, OR OTHER DATA
TYPE OF SUBMISSION	TYPE OF ACTION	
Notice of Intent	Abandonment /	Change of Plans
·	X Recompletion	New Construction
Subsequent Report	Plugging Back	Non-Routine Fracturing
	Casing Repair	Water Shut-Off
Final Abandonment Notice	Altering Casing	Conversion to Injection
	Other	
	Recompletion Report	of multiple completion on Well Completion or and Log form.)
Marathon has completed the f		
6/13 Drilled out cement and 6/16 Drilled out cement and 6/17 Acidized same with 650 6/19 Perforated the Upper I 6/20 Acidized same with 850	: 5509' KB and pumped 150 sacks of Cla I pumped an additional 50 sacks of Cla I perforated the Upper Ismay from 5494 O gallons of 15% FeHCL and swabbed for Ismay from 5478'-94' KB with 4 JSPF.	ss 'G' cement. '-5506' with 4 JSPF.
6/21 Swabbed for cleanup.		
6/22 Placed the well on pro	oduction.	
		* · · · · · · · · · · · · · · · · · · ·
	M-2, WRF, FMK, Title & Contracts (Hous	ton), WTR-5, SPO
4. I hereby certify that the foregoing is true and correct		
Signed K. T. Meabon by FMK	Title Regulatory Coordinator	Date 7/27/90
(This space for Federal or State office vse)	Branch of Fluid Minerals	
Approved by APPOP	Title Mach District	Date JUL 3 0 1990
Conditions of approval, if any:		Date Commission of the Commiss



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Utah State Office P.O. Box 45155 Salt Lake City, Utah 84145-0155



3AS & Mill

IN REPLY REFER TO: UT-922

January 12, 1996

Cochrane Resources, Inc. P.O. Box 1656
Roosevelt, Utah 84066

RE:

Tin Cup Mesa Unit

San Juan County, Utah

Gentlemen:

On January 11, 1996, we received an indenture dated January 9, 1996, whereby Marathon Oil Company resigned as Unit Operator and Cochrane Resources, Inc. was designated as Successor Unit Operator for the Tin Cup Mesa Unit, San Juan County, Utah.

This indenture was executed by all required parties and the signatory parties have complied with Sections 5 and 6 of the unit agreement. The instrument is hereby approved effective January 12, 1996. In approving this designation, the Authorized Officer neither warrants nor certifies that the designated party has obtained all required approval that would entitle it to conduct operations under the Tin Cup Mesa Unit Agreement.

Your statewide (Utah) oil and gas bond No. 0699 will be used to cover all operations within the Tin Cup Mesa Unit.

It is requested that you notify all interested parties of the change in unit operator. Copies of the approved instruments are being distributed to the appropriate federal offices, with one copy returned herewith.

Sincerely,

/s/ Robert A. Henricks

Robert A. Henricks Chief, Branch of Fluid Minerals

Enclosure

bcc: District Manager - Moab (w/enclosure)

Division of Oil, Gas & Mining

Division of Mineral Adjudication U-923 File - Tin Cup Mesa Unit (w/enclosure)

MMS - Data Management Division ((Attn: Rose Dablo)

Agr. Sec. Chron

Fluid Chron

U-922:TAThompson:tt:01-12-96

Page No. 01/12/96

WELL STATUS REPORTS UTAH STATE OFFICE

INSPECTION ITEM AFI NO. WELL QTQT SEC TWX RNG WELL LEASE NAME OPERATOR NUMBER STATUS

** INSPECTION ITEM	8910203910 31761	TIN CO	MESA IS	À			E	ntily#	
8910203910	43037 5966500 \$1	10.0	SWAW	25 38	S 25E	WDW	UTU31928	,	MARATHON OIL COMPANY
8910203910	43037306900051	1-25	SWNW	25 38	S 25K	WIW	UTU31928	2765	MARATHON OIL COMPANY 431928
8910203910	430373080800S1	2-23	SESW	23 38	S 25E	POW	UTU31928	44	HARATHON OIL COMPANY U31928
3910203910	4303730 98300 \$1	2-25	nask	25 38	S 25E	POW	UTU13655	H	MARATHON OIL COMPANY U13655
8 9 10203910	43037308150051	3-23	SWSW	23 38	S 25E	WIWS!	UTU31928	li .	MARATHON OIL COMPANY U31928
√8910203910	43037310200051	3-25	Sesw	25 38	S 25K	TA	UTV13655	tr.	MARATHON OIL COMPANY U/3655
8910203910	43037307620051		KWKE	26 38	S 25B	MIN	UTU31928	#	MARATHON OIL COMPANY U31928
8910203910	43037311450051	4-25	SESW	25 38	S 25E	MIM	UTU13655	į i	MARATHON OIL COMPANY UB6 55
8910203910	8430373094100S1	4-26	SENE	26 38	S 25E	WIW	UTU31928	st	MARATHON OIL COMPANY U 31928
-8 910203910	430373136800S1	5-26	SWNZ	26 38	S 25E	POW	UTU31928	ч	MARATHON OIL COMPANY U31928
- 8910203910	430373154000\$1	6-26	RESE	26 38	S 25E	POW	UTU31928	*	MARATHON CIL COMPANY U31928

RESIGNATION OF OPERATOR

Tin Cup Mesa Unit Area

County of San Juan

State of Utah

Unit Agreement No. 14-08-0001-20391

Under and pursuant to the provisions of Section 5 of the Unit Agreement for the Development and Operation of the Tin Cup Mesa Unit Area, San Juan County, Utah, Marathon Oil Company, the designated Unit Operator under said Unit Agreement, does hereby resign as Unit Operator, effective upon the selection and approval of a successor Unit Operator.

EXECUTED with effect as aforesaid this 29th day of November, 1995.

ATTEST:

MARATHON OIL COMPANY

By: A.R. Kukla

Title: Attorney-In-Fact

TCL\MISCTCL\TCUP3\mlv

12-19-95

Authorized Officer
Bureau of Land Management

Re: Tin Cup Mesa Unit
San Juan County, Utah

Gentlemen:

Agreement, hereby certifies that the requisite approvals of the current working interest owners in the agreement have been obtained to satisfy the requirements for selection of a successor operator as set forth under the terms and provisions of the agreement. All operations within the Tin Cup MesaUnit Agreement will be covered by bond no. UT0699.

Sincerely,

Enclosures

Ken Allen

Cochrane Resources, Inc.

President

OPERATOR CHANGE H	9			Routide:
		ion regarding this change e N/A if item is not appl		2-DFR 8-FILE 3-VLD 4-RJF /V
x Change of Opera □ Designation of (□ Designation □ Operator Nam		5-LR (14) 6-SJ
The operator of th	ne well(s) listed be	low has changed (EFF	FECTIVE DATE: 12-0	01-95)
	COCHRANE RESOURCES PO BOX 1656 ROOSEVELT UT 8406		ner operator) <u>MARATE</u> (address) <u>PO BOX</u> <u>MIDLAN</u>	
	phone <u>(801) 722–50</u> account no. <u>N 7015</u>			(915) 687-8155 nt no. <u>N 3490</u>
dell(S) (attach addi	tional page if needed):	*TIN CUP MESA	UNIT	
		-31368 Entity:	SecTwpRng	Lease Type:
Name:	API:	Entity:	SecTwpRng SecTwpRng	
Name:	API:	Entity:	SecTwpRng	Lease Type:
Name :	API:	Entity:	SecTwpRng	
Name:	API:	Entity:	Sec Two Rna	
Name:	API:	Entity:	SecTwpRng	
Name:	API:	Entity:		
operator (A fue 2. (Rule R615-	ttach to this form) 8-10) Sundry or oth	<i>Chep. 1-19-96) (Lech</i> er legal documentati	1-23-96)	eceived from <u>former</u> ed from <u>new</u> operator
(Attach to	this form). (Reg. 1-7	2-96) (he'd 1-23-96)		.**
operating a	ent of Commerce has ny wells in Utah. ompany file number:	is company register	the new operator abored with the state?	ove is not currently ? (yes/no) If
(attach lei comments se	lephone Documentati ction of this form	on Form to this re . Management revie	eport). Make note w of Federal and I	garding this change of BLM status in I ndian w ell operator low.
<u>LL</u> C5. Changes have listed above	e been entered in t e. <i>(2-8-96 0 & 6 Wolls)</i> (he Oil and Gas Infor Ing. Wells 4-3-967	rmation System (Wan	low. g/IBM) for each well g)(Ind. Wells 4.3.96)
				- / - /
Lc 7. Well file la	abels have been upda	ated for each well l	isted above. <i>[28-960</i>	126 Wells) (Inj. Wells 4-3-90
TOT DISTRIBIT	UTION TO STATE LAND	and the lay Commis	cion la cal section	ccount Changes" memo
409. A folder ha placed there	s been set up for t e for reference dur	the Operator Change ing routing and proc	file, and a copy of essing of the origi	this page has been nai documents.

OPERATOR CHANGE WORKSHEET (CONTINUED) Initial each item when completed. Write N/A if item is not applicable.
ENTITY REVIEW
(Rule R615-8-7) Entity assignments have been reviewed for all wells listed above. Were entity changes made? (yes/no) (If entity assignments were changed, attach copies of Form 6, Entity Action Form).
2. State Lands and the Tax Commission have been notified through normal procedures of entity changes.
BOND VERIFICATION (Fee wells only)
NA). (Rule R615-3-1) The new operator of any fee lease well listed above has furnished a proper bond.
2. A copy of this form has been placed in the new and former operators' bond files.
3. The former operator has requested a release of liability from their bond (yes/no) Today's date 19 If yes, division response was made by letter dated 19
EASE INTEREST OHNER NOTIFICATION RESPONSIBILITY
(Rule R615-2-10) The former operator/lessee of any fee lease well listed above has been notified by letter dated
ILMING M. All attachments to this form have been microfilmed. Date: April 17 1990.
ILING
1. Copies of all attachments to this form have been filed in each well file.
2. The <u>original</u> of this form and the <u>original</u> attachments have been filed in the Operator Change file.
OMMENTS
960119 Blm/SL apr. ef. 1-12-96.

WE71/34-35

Division of Oil, Gas and Mining

OPERATOR CHANGE WORKSHEET

ROUTING
1. DJJ
2. CDW

X -	Change	of Opera	itor (Well	Sold

Operator Name Change/Merger

The operator of the well(s) listed below has change	ged, effective	e:	4/1/2008				
FROM: (Old Operator):			TO: (New Op	perator):			
N7015-Cochrane Resources, Inc			N8195-Mar/Re	•	nany		
PO Box 1656			PO Box		, w		
Roosevelt, UT 84066			9	IV 89511			
			,				
Phone: 1 (435-722-5081			Phone: 1 (775)	852-7444			
CA No.			Unit:		TIN CUP	MESA	
WELL NAME	SEC TWN	RNG	API NO	ENTITY	LEASE TYPE	WELL	WELL
				NO		TYPE	STATUS
SEE ATTACHED LIST							
 OPERATOR CHANGES DOCUMENTA Enter date after each listed item is completed (R649-8-10) Sundry or legal documentation wa (R649-8-10) Sundry or legal documentation wa The new company was checked on the Departman Is the new operator registered in the State of Ua If NO, the operator was contacted contacted on (R649-9-2) Waste Management Plan has been red Inspections of LA PA state/fee well sites complete. Reports current for Production/Disposition & State of Complete State of Production and Indian Lease Wells: The BL or operator change for all wells listed on Federal Federal and Indian Units: The BLM or BIA has approved the successor 	s received from the service on: ete on: undries on: M and or the all or Indian le	e BIA h	NEW operator Provision of Co Business Numb IN PLACE ok as approved the on:	on: orporations oer: merger, na BLM	1267088-0143	BIA	6/23/2008
8. Federal and Indian Communization Agr	reements ('	"CA"):			•	
The BLM or BIA has approved the operator f					n/a	ı	
9. Underground Injection Control ("UIC"					orm 5, Transfer	of Autho	ority to
Inject, for the enhanced/secondary recovery un	it/project for	the wa	ater disposal wel	l(s) listed o	n:	7/2/2008	<u> </u>
DATA ENTRY:							
1. Changes entered in the Oil and Gas Database			7/1/2008				
2. Changes have been entered on the Monthly Op	erator Cha	nge Sp			7/1/2008	•	
3. Bond information entered in RBDMS on:			n/a				
4. Fee/State wells attached to bond in RBDMS on			n/a	•			
5. Injection Projects to new operator in RBDMS o			n/a	,			
6. Receipt of Acceptance of Drilling Procedures for	or APD/New	on:		n/a	-		
BOND VERIFICATION:			LUMBOOOLS				
1. Federal well(s) covered by Bond Number:			UTB000019				
2. Indian well(s) covered by Bond Number:	IZ-3 11-2 - 1		n/a	•	I		
3a. (R649-3-1) The NEW operator of any fee well	(s) listed co	verea t	y Bona Number	Γ	n/a		
COMMENTS:	····						

STATE OF UTAH		FORM 9
DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING	5. LEASE DESIGNATION AND SERIAL NUMBER: SEE ATTACHED	
SUNDRY NOTICES AND REPORTS ON	WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for suc	n-hole depth, reenter plugged wells, or to th proposals.	7. UNIT OF CA AGREEMENT NAME: SEE ATTACHED
1. TYPE OF WELL OIL WELL GAS WELL OTHER		8. WELL NAME and NUMBER: SEE ATTACHED
2. NAME OF OPERATOR: COCHRANE RESOURCES, INC. N 1015	- WW	9. API NUMBER:
3. ADDRESS OF OPERATOR:	PHONE NUMBER:	10. FIELD AND POOL, OR WILDCAT:
PO BOX 1656 CITY ROOSEVELT STATE UT 21F 84606		TIN CUP MESA
4. LOCATION OF WELL SHOUTH SHO	66	COUNTY: SAN JUAN
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:		STATE: UTAH
11. CHECK APPROPRIATE BOXES TO INDICATE NAT	TURE OF NOTICE, REPO	RT, OR OTHER DATA
TYPE OF SUBMISSION	TYPE OF ACTION	
□ NOTICE OF INTENT □	EEPEN	REPERFORATE CURRENT FORMATION
	RACTURE TREAT	SIDETRACK TO REPAIR WELL
	EW CONSTRUCTION	TEMPORARILY ABANDON
	PERATOR CHANGE	TUBING REPAIR
	LUG AND ABANDON	U VENT OR FLARE
(Submit Original Form Only)	LUG BACK	WATER DISPOSAL
Date of work completion:	RODUCTION (START/RESUME)	WATER SHUT-OFF
	ECLAMATION OF WELL SITE	OTHER: CHANGE OF OPERATOR
CONVERT WELL TYPE RI	ECOMPLETE - DIFFERENT FORMATION	OI LIVATOR
The successor Operator for this well will be: Mar/Reg Oil Company PO Box 18148 Reno, NV 89511 (775) 852-7444 Agreed and accepted this day of June 2008 Effective April 1, 2008 Mar/Reg Oil Company By: Rhonda Ahmad President Mar/Reg State Wide Bond # is UTB000019		es, etc
NAME (PLEASE PRINT) KEN ALLEN	TITLE PRESIDENT	
SIGNATURE	DATE	
(This space for State use only)		RECEIVED

JUN 0 3 2008

DIV. OF OIL, GAS & MINING

APPROVED 71/12008

Carlene Russell

Division of Oil, Gas and Mining

Earlene Russell, Engineering Technician

(See Instructions on Reverse Side)

(5/2000)

STATE OF UTAH

DEPARTMENT OF NATURAL RESOURCES 5. LEASE DESIGNATION AND SERIAL NUMBER: DIVISION OF OIL, GAS AND MINING SEE ATTACHED 6. IF INDIAN, ALLOTTEE OR TRIBE NAME: SUNDRY NOTICES AND REPORTS ON WELLS 7. UNIT or CA AGREEMENT NAME: Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals. SEE ATTACHED 8. WELL NAME and NUMBER: 1 TYPE OF WELL OIL WELL 🔽 GAS WELL OTHER SEE ATTACHED 2. NAME OF OPERATOR: 9. API NUMBER: COCHRANE RESOURCES, INC. PHONE NUMBER: 10 FIELD AND POOL OR WILDCAT: 3. ADDRESS OF OPERATOR: CITY ROOSEVELT STATE UT 7IP **84606** (435) 722-5081 TIN CUP MESA PO BOX 1656 4. LOCATION OF WELL COUNTY: SAN JUAN FOOTAGES AT SURFACE: SEE ATTACHED; EXHIBIT "A" QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: STATE: UTAH CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA 11. TYPE OF ACTION TYPE OF SUBMISSION **ACIDIZE** DEEPEN REPERFORATE CURRENT FORMATION NOTICE OF INTENT FRACTURE TREAT SIDETRACK TO REPAIR WELL (Submit in Duplicate) ALTER CASING Approximate date work will start: CASING REPAIR NEW CONSTRUCTION TEMPORARILY ABANDON CHANGE TO PREVIOUS PLANS **OPERATOR CHANGE** TUBING REPAIR PLUG AND ABANDON VENT OR FLARE CHANGE TUBING SUBSEQUENT REPORT PLUG BACK WATER DISPOSAL CHANGE WELL NAME (Submit Original Form Only) WATER SHUT-OFF CHANGE WELL STATUS PRODUCTION (START/RESUME) Date of work completion: OTHER: CHANGE OF COMMINGLE PRODUCING FORMATIONS RECLAMATION OF WELL SITE **OPERATOR** CONVERT WELL TYPE **RECOMPLETE - DIFFERENT FORMATION** DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. The successor Operator for this well will be: Mar/Reg Oil Company PO Box 18148 Reno, NV 89511 (775) 852-7444 Agreed and accepted this 3rd day of June 2008 Mar/Reg Oil Company By: Rhonda Ahmad President Mar/Reg State Wide Bond # is UTB000019 PRESIDENT KEN ALLEN NAME (PLEASE PRINT) DATE

(This space for State use only)

(5/2000)

APPROVED 71/12008

Division of Oil, Gas and Mining

Earlene Russell, Engineering Technician

(See Instructions on Reverse Side)

RECEIVED

JUN 0 4 2008

DIV. OF OIL, GAS & MINING

Exhibit A Well List

Tin Cup Mesa Unit Field

	<u>Lease</u>					<u>Utah</u>
API#	<u>Type</u>	Well Name	Well Type	County	<u>Location</u>	Entity #
43-037-30690	Federal	TIN CUP MESA 1-25	Water Injection Well	SAN JUAN	25 SWNW T38S R25E	2765
43-037-30762	Federal	TIN CUP MESA 3-26	Oil Well	SAN JUAN	26 NWNE T38S R25E	2765
43-037-30808	Federal	TIN CUP MESA 2-23	Oil Well	SAN JUAN	23 SESW T38S R25E	2765
43-037-30815	Federal	TIN CUP MESA 3-23	Oil Well	SAN JUAN	23 SWSW T38S R25E	2765
43-037-30941	Federal	TIN CUP MESA 4-26	Oil Well	SAN JUAN	26 SENE T38S R25E	2765
43-037-30983	Federal	TIN CUP MESA 2-25	Oil Well	SAN JUAN	25 NWSW T38S R25E	2765
43-037-31020	Federal	TIN CUP MESA 3-25	Oil Well	SAN JUAN	25 SESW T38S R25E	2765
43-037-31145	Federal	TIN CUP MESA 4-25	Oil Well	SAN JUAN	25 SESW T38S R25E	2765
43-037-31368	Federal	TIN CUP MESA 5-26	Oil Well	SAN JUAN	26 SWNE T38S R25E	2765
43-037-31540	Federal	TIN CUP MESA 6-26	Oil Well	SAN JUAN	26 NESE T38S R25E	2765
43-037-31761	Federal	WDW 1	Water Disposal Well	SAN JUAN	25 SWNW T38S R25E	



United States Department of the Interior

TAKE ERICA

BUREAU OF LAND MANAGEMENT

Utah State Office
P.O. Box 45155
Salt Lake City, UT 84145-0155
http://www.blm.gov/ut/st/en.html

IN REPLY REFER TO 3180 UT-922

May 28, 2008

Mar/Reg Oil Company P. O. Box 18148 Reno, Nevada 89511

Re:

Tin Cup Mesa Unit San Juan County, Utah

Dear Ms. Ahmad:

On May 23, 2008, we received an indenture dated May 7, 2008, whereby Cochrane Resources, Inc. resigned as Unit Operator and Mar/Reg Oil Company was designated as Successor Unit Operator for the Tin Cup Mesa Unit, San Juan County, Utah.

This indenture was executed by all required parties and the signatory parties have complied with Sections 5 and 6 of the unit agreement. The instrument is hereby approved effective May 28, 2008. In approving this designation, the Authorized Officer neither warrants nor certifies that the designated party has obtained all required approval that would entitle it to conduct operations under the Tin Cup Mesa Unit Agreement.

Your statewide oil and gas bond no. UTB000019 will be used to cover all operations within the Tin Cup Mesa Unit.

It is requested that you notify all interested parties of the change in unit operator. Copies of the approved instruments are being distributed to the appropriate agencies, with one copy returned herewith.

Sincerely,

/s/ Becky J. Hammond

Becky J. Hammond Chief, Branch of Fluid Minerals

Enclosure



Type of Well

a Address

Oil Well

TYPE OF SUBMISSION

Name of Operator
MAR/REG OIL COMPANY

O Box 18148, Reno, NV 89511

Notice of Intent

Subsequent Report

Final Abandonment Notice

Location of Well (Footage, Sec., T.,R.,M., or Survey Description)
375 ft FNL, 1635 ft. FEL, Sec. 26 738S, R25E, SLM

UNITED STATES DEPARTMENT OF THE INTERIOR **BUREAU OF LAND MANAGEMENT**

200m	
$\mathcal{Y}_{\mathcal{O}}$ 1	FORM APPROVED
	OMB No. 1004-0137
	Expires: July 31, 2010

SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

		2 (2)			
UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT NDRY NOTICES AND REPORTS ON WELLS se this form for proposals to drill or to re-enter and well. Use Form 3160-3 (APD) for such proposals.			FORM APPROVED OMB No. 1004-0137 Expires: July 31, 2010 5. Lease Serial No. U-31928 6. If Indian, Allottee or Tribe Name		
SUBMIT IN TRIPLICATE - Other		is.	7. If Unit of CA/Agreem	nent, Name and/or No. Tin Cup Mesa	_
Gas Well Other			8. Well Name and No.		
(9. API Well No.	43-037-31368	
	3b. Phone No. (include area co 775-852-7444	ode)	10. Field and Pool or Ex		
e, Sec., T.,R.,M., or Survey Description, 138S, R25E, SLM	(11. Country or Parish, St	tate San Juan, Utah	
12. CHECK THE APPROPRIATE BO	X(ES) TO INDICATE NATUR	E OF NOTIO	CE, REPORT OR OTHER	R DATA	
ION	TY	PE OF ACT	ION		
Acidize Alter Casing Casing Repair Change Plans Convert to Injection	Deepen Fracture Treat New Construction Plug and Abandon Plug Back	Recla	uction (Start/Resume) amation mplete corarily Abandon or Disposal	Water Shut-Off Well Integrity Other Raise Pump	
mpleted Operation: Clearly state all pert a directionally or recomplete horizontall which the work will be performed or pro the involved operations. If the operation ted. Final Abandonment Notices must be is ready for final inspection.)	y, give subsurface locations and vide the Bond No. on file with I on results in a multiple completion	measured ar BLM/BIA. R on or recomp	nd true vertical depths of a dequired subsequent repor letion in a new interval, a	all pertinent markers and zones. ts must be filed within 30 days Form 3160-4 must be filed once	If
eated pump, pumped 50 bbl. hot oil g Nipple at 3244.86 ft.	water down tubing to disolve	paraffin. P	ulled rods and pump.	Pulled 52 joints of 2-7/8" tubing	ļ
x2"x20' RWBC pump, 120-3/4" rods	, 8-7/8" rods, 1-1"x2' pony, 1-	-1"x4' pony,	1'1"x6' pony and 22' po	olished rod. Total rod	
l shut-in awaiting fuel gas to put wel	l into production.				
				RECEIVED	

3. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measure Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BLA following completion of the involved operations. If the operation results in a multiple completion or reco testing has been completed. Final Abandonment Notices must be filed only after all requirements, includ determined that the site is ready for final inspection.)

june 24, 2008 MIRU, unseated pump, pumped 50 bbl. hot oil/water down tubing to disolve paraffin and laid down. Set Seating Nipple at 3244.86 ft.

une 25, 2008 RIH 2-1/2"x2"x20' RWBC pump, 120-3/4" rods, 8-7/8" rods, 1-1"x2' pony, 1-1"x4' po onfiguration: 3,254 ft.

Moved rig off hole, left well shut-in awaiting fuel gas to put well into production.

JUL 0 8 2008

DIV. OF OIL, GAS & MINING

			·····III	
4. I hereby certify that the foregoing is true and correct. Name (Printed/Typed) "ariq Ahmad"				
	Title Petroleum Enginee	r		
Signature Wy	Date 07/02/2008			
THIS SPACE FOR FEDER	RAL OR STATE OF	FICE USE		
pproved by				
	Title	Date		
anditions of approval, if any, are attached. Approval of this notice does not warrant or certify at the applicant holds legal or equitable title to those rights in the subject lease which would able the applicant to conduct operations thereon.				
itle 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any per- ctitious or fraudulent statements or representations as to any matter within its jurisdiction.		o make to any department or agency of the Unite	d States any false,	



(Instructions on page 2)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FURIN AFFRUY
OMB No. 1004-0
Expires: July 31, 2

SUNDRY NOTICES AND REPORTS ON WELLS
Do not use this form for proposals to drill or to re-enter an
shandoned well. Use Form 3160-3 (APD) for such proposals.

5. Lease Serial No. U-31928 6. If Indian, Allottee or Tribe Name

abandoned well.	Use Form 3160-3 (A	APD) for such pr	oposals.		
	IN TRIPLICATE - Othe			7. If Unit of CA/Agree	ement, Name and/or No. Tin Cup Mesa
I. Type of Well ✓ Oil Well ✓ Gas W	'ell Other			8. Well Name and No	Tin Cup Mesa 5-26
Name of Operator				9. API Well No.	43-037-31368
MAR/REG OIL COMPANY 3a. Address PO Box 18148, Reno, NV 89511		3b. Phone No. (incluation 775-852-7444	le area code)	10. Field and Pool or	Tin Cup Mesa
4. Location of Well <i>(Footage, Sec., T.,</i> 375 ft FNL, 1635 ft. FEL, Sec. 28 T38S, R25E,	R.,M., or Survey Description SLM	n)		11. Country or Parish,	State San Juan, Utah
12. CHEC	K THE APPROPRIATE B	OX(ES) TO INDICATE	NATURE OF N	OTICE, REPORT OR OTH	ER DATA
TYPE OF SUBMISSION			TYPE OF		
Notice of Intent	Acidize Alter Casing	Deepen Fracture Trea	F	Production (Start/Resume) Reclamation	Water Shut-Off Well Integrity ✓ Other Repair Broken Rod
Subsequent Report	Casing Repair Change Plans	New Constru		Recomplete Temporarily Abandon	Other
Final Abandonment Notice	Convert to Injection	Plug Back		Water Disposal	k and approximate duration thereof. If of all pertinent markers and zones.
testing has been completed. Final determined that the site is ready for Broken Sucker Rod Action Taken:	vork will be performed or p. red operations. If the operat Abandonment Notices must r final inspection.) double overshot. Secure 7/8" rod. Set Seating Nig	tion results in a multiple to be filed only after all results in a multiple to the filed only after all results and the filed only after all results are the filed only after all results and filed only after all results are filed only after all results and filed only after all results are filed on	completion or recomments, inch	completion in a new intervaluding reclamation, have been also been	i, a Form 3160-4 must be filed once to completed and the operator has in the completed and the operator has in the completed and the operator has in the complete and the comple
Pump 2-1/2"x2"x20' RWBC pump, * Placed well into production.	120-3/4" rods, 72-7/6 Toc	15, 1-1 X2 SUD, 1-1 X0	Sub, T T No Su		
14. I hereby certify that the foregoing is	\	ted/Typed) Title	ENG	WEER-	·
Signature Curat	to theen	7 Date	05/	07/09	
Organization / Control	THIS SPACE	E FOR FEDERAL	OR STATE	OFFICE USE	
Approved by					
Conditions of approval, if any, are attach that the applicant holds legal or equitable	title to those rights in the suc	Ject reaso which would	Title Office		Date
Title 18 U.S.C. Section 1001 and Title 4. fictitious or fraudulent statements or rep	3 U.S.C. Section 1212, make	it a crime for any person l within its jurisdiction.	mowingly and wil		ent or agency of the United States any fals
(Instructions on page 2)				HE	CEIVED

MAY 1 2 2009



UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires: July 31, 201

	Expires: Ju
Carried Ma	

SUNDRY NOTICES AND REPORTS ON WELLS

U-31928 6. If Indian, Allottee or Tribe Name

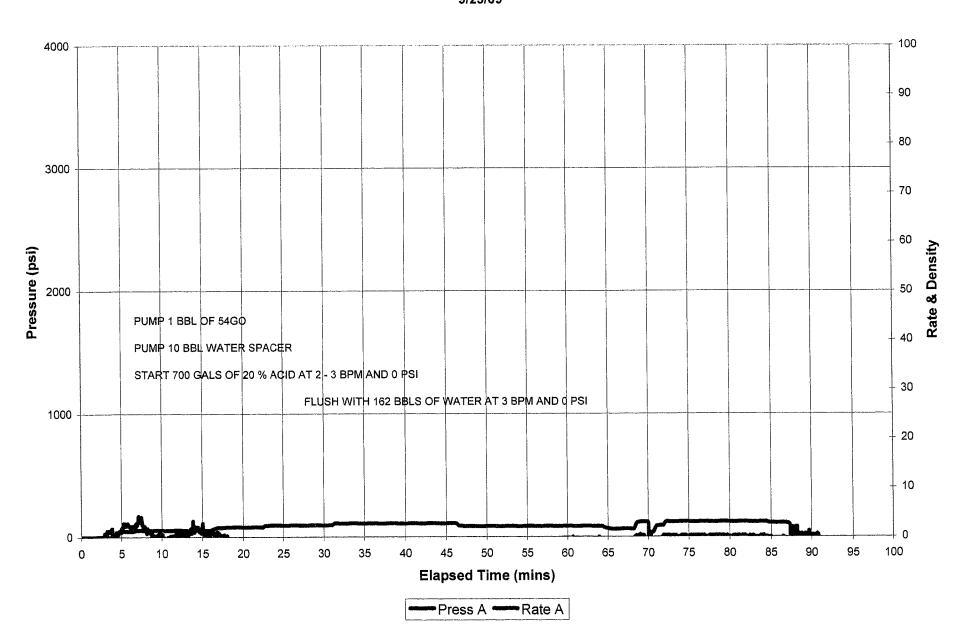
Do aba	not use this fondoned well.	orm : Jse l	for proposals Form 3160-3 (<i>F</i>	to drill o	r to re-en such pro	ter an posals.					·
	SUBMIT	'IN TI	RIPLICATE – Othe	r instruction	ns on page 2	<u>.</u>		7. If Unit of CA/Agree	ment, Name an Tin Cup Me		
 Type of Well Oil Well Gas Well Other 								8. Well Name and No.	Federal 5-2	26	
2. Name of Opera MAR/REG OIL O	tor COMPANY							9. API Well No.	43-037-313	68	
3a. Address				3b. Phone	No. (include	area code)		10. Field and Pool or E	-		
PO Box 18148, Reno,				775-852-	7444				Tin Cup Me	isa 	
4. Location of Williams first FNL, 1635 ft. F	ell <i>(Footage, Sec., T.,)</i> FEL, Sec. 26, T38S, R25E	R., <i>M</i> ., o	or Survey Description	n)				11. Country or Parish,	State San Juan, I	Jtah	
,	12. CHEC	K THI	E APPROPRIATE B	OX(ES) TO	INDICATE 1	NATURE OF	NOT	ICE, REPORT OR OTH	ER DATA		_
TYPE OF	SUBMISSION			<i>i</i>		ТҮРЕ О	F AC	TION			
Notice of Ir	itent	<u>v</u>	Acidize Alter Casing		Deepen Fracture Treat			oduction (Start/Resume)	Water Shut-Off Well Integrity		
✓ Subsequent	Report		Casing Repair Change Plans	=	New Construc Plug and Abar		_	complete mporarily Abandon	Other _		
Final Aban	donment Notice		Convert to Injection		Plug Back		Water Disposal		+		
testing has be	een completed. Final nat the site is ready fo	Aband r final np 55 n.	onment Notices must inspection.) gal of 54GO down	t be filed onl	iy after all req	roduction wa	ludin	npletion in a new interval ig reclamation, have been or spacer. Pump 700 g	completed and	the operator has	
Sept 24, 2009	Place well into prod	duction	٦.	. :							
14. I hereby certification Dan Green	y that the foregoing is	rue and	d correct. Name (Prin	ted/Typed)	Title	Engineer					
Signature	Dania F		Green	:	Date	10/23/2009					
			THIS SPACE	FOR FI	EDERAL	OR STAT	E O	FFICE USE			
Approved by		···				Tielo			Date		
that the applicant l	oval, if any, are attache nolds legal or equitable at to conduct operations	title to	those rights in the sub	es not warran ject lease wh	nt or certify	Citle Office					
	ection 1001 and Title 43					owingly and w	illfull	y to make to any departme	nt or agency of	he United States any f	alse

(Instructions on page 2)

RECEIVED OCT 27 2009

					STI	MULATIO	ON REP	ORT					
CUSTOMER:								DATE:					
MAR/REG OIL COMPANY									9/23/2009				
WELL NAME:					7-				CUSTOME	R REP:			
TIN CUP 5-26					\mathbf{I}						DAN GRE	EN	
LEGAL DE		: SEC, TWF							SERVICE S	SUPERVISOR			
CEGAL DE			·		٠.,		The state of the s		OLKVIOL (·· <u>··</u> ···	
		C26,T38S	,R25E		Acid	IZING 8	CEME	NTING			/illiams, E	ave	
COUNTY, S	STATE:								GPS COO	RDINATES:			
	S	AN JUAN	, UT		FIELD IN	VOICE#:	71 ⁻	193	ŀ		0		
	FORMATIO			PERFOR	ATIONS				C	<u>, in a salah dan kecamatan dan kecamatan bermalah bermalah dan kecamatan bermalah dan kecamatan bermalah dan kecamatan bermalah dan kecamatan bermalah dan kecamatan bermalah dan kecamatan bermalah dan kecamatan bermalah dan kecamatan bermalah bermalah dan kecamatan bermalah dan kecamatan bermalah dan kecamatan bermalah dan kecamatan bermalah dan kecamatan bermalah bermalah dan kecamatan bermalah dan kecamatan bermalah dan kecamatan</u>			
			TOP BOTTOM		# HOLES	HOLE SIZE	CASING	SIZE	WGT	GRADE		DEPTH	
DE	SERT CRE	EK	5526					7	26			5360	
							LINER	SIZE	WGT	GRADE	TOP	DEPTH	
			 				and the same	SIZE	WGT	GRADE	PKR Y/N	DEPTH	
							TUBING	2 7/8	6.5			4858	
	JOB T	YPE, ACID	SPOT, ACID, I	BD, FRAC, C	THER					T VIA, CASING		an a sign	
			ACID JOB						TUBING				
					PR	OPOSED	JOB SUN	IMARY	- Carlo - Carl		ede Augusta	ran a mada a san a san a san a san a san a san a san a san a san a san a san a san a san a san a san a san a s	
		FILL CAS	SING;TREA	T DOWN	TUBING WITH 54-GO AND THEN					C/	ALC CAPAC	and the second s	
	OSED	PUMP 70	00 GALS O	F 20% AC	ID					bbl/ft	depth	bbl cap	
	EDURE	1							TUBING	0.00579	4973		
SUM	WARY	j							CASING			162	
		ļ					W	2.6	ANNULAR				
ACID	CL		O%	700 C	Contract of the contract of th	FRAC	FLUID	BASE	FLUID	FOAI	W %	MITCH or CIP	
	J.L.	TYPE	SIZE	SP GR	#BALLS	PAD VO) (gai)	S/L Vol (gal)		MAX PROP (ppg)		PROP SIZE	
BALLSE	EALERS		SIEL	Or GIV	#BALLS FADVO)	Ork Voi (gai)		THE STATE OF THE S		1,407,0122	
MAX PR	ESSURE		<u> </u>	TOT FRAC		FLUID (gal)	TOTAL BASE (gal)		PROP TYPE		TOTAL PROP (lb)		
			A. Section 1	e increase to receive									
					1 14	ACTUAL .	JOB DETA	AILS					
TIME	(1R#)		SLURRY PUM		N2 RATE, SCFM	CALC DH TOTAL RATE	SURFACE CO2/N2 PUMPED		EVENT				
				STG	CUMM	A. D. J. J. S. S. S. S. S. S. S. S. S. S. S. S. S.	 	STG	CUMM		, ha da garana		
9:30												location	
												procedure;jsea	
										abc		i0 gals of 54go	
			-							test lien to 200 psi			
	0		3	10						open well start pumping water spacer pump 10 water spacer			
	0		3	16								0% acid at 2-3 bpm	
	0		3	162	188					and 0 psi; flush with 162 bbls of wat			
										at 3 bpm and 0 psi			
									shut down ; well had 0 psi			well had 0 psi	
						 				<u> </u>	······		
						1							
	IG PRESSU	and the market and a facility	0	psi		ISIP:	UDES	0	psi	MIN RATE:	2	bpm	
TREATING PRESSURE MAX: AVG TREATING PRESSURE:		40	psi	عمار معود وراولت	N SI PRESS IN SI PRESS	AND REGION AND ASSESSMENT		psi	MAX RATE:	3	bpm		
AVG TREATING PRESSURE: 0 psi		psi	and the second second	IN SI PRESS IN SI PRESS	The first of the control of		psi	AVG RATE:	3	bpm			
Wellbor			bbl	ı	10 1/1	or LKE99	.U		psi	l			
Ac	48 1		bbi									1	
Frac			i i										
Flush/Disp			bbl bbl										
. IdeiliDist	, acoment	L	וטטו			ı	PACI	SUPERVIS	SOR:	i	Willian	ns, Dave	
CUSTOMER REPRESENTATIVE: DAN GREET													
JUSTOME			<u> </u>	OILLE		nage 4	the state of			L	·		
					·	page 1							

MAR/REG OIL COMPANY TIN CUP 5-26 ACID /SCALE 9/23/09



10	Continued from page TIN CUP 5-26 ACID TREAT MENT 9/23/2009
10	PROBLEM! SCALE IN FORMATION
******	ACIDIZE 700 GAL 20% HCL, 55 GAL 5460, 162 BBL WATER 059
8:30	PACEAC ON LOCATION, RWTKHCKING ON LOCATION
9:00	RU 54GO SOLVENT PUMP5550GAL DOWN CSG
9.3	PUMPIOS BBL WATER DOWN CSG
	PUMP 700 GAL DOWN CSG
10:00	PRIMP WATER DOWN CSG 162BBL
10:30	
	PICK UP ADDI WATER
10'0	5 WATER TRUCK RETURNS (STATUS 132 BBLS TOTALON
	VACUUM)
11:15	S PUMPED 189 BBL TOTAL ACID AND WATER
	SAUT-IN OVER NIGHT
11130	O OPE LOCATION
,	
ļ	Cohtinued to page
SIGNAT	DATE
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
DISCLO	DISED TO AND UNDERSTOOD BY DATE PROPRIETARY INFORMATION
	THOTTILIZET IN OTHER TION